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GUIDANCE ON MARKET-BASED SANITATION

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Abbreviations

BCC	Behaviour change communication	oss	One-stop shop
C4D	Communication for development	ODF	Open defecation-free
CATS	Community approaches to total sanitation	PHAST	Participatory hygiene and sanitation transformation
CCT	Conditional cash transfer	RBF	Results-based finance
CLTS	Community-led total sanitation	RFP	Request for proposals
CSO	Civil society organisation		
DCC	Direct consumer contact	SDG	Sustainable Development Goal
DHS	Demographic and health survey	SME	Small- and medium-enterprise
GIS	Geographic information systems	SNV	Netherlands international development organisation (Stichting Nederlandse Vrijwilligers)
GLAAS	Global analysis and assessment of sanitation and drinking water	TSP	Turnkey service provider
JMP	WHO-UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene	UNICEF	United Nations Children's Fund
HCD	Human-centred design	VSLA	Village savings and loan association
IPC	Interpersonal communication	WASH	Water, sanitation and hygiene
MBS	Market-based sanitation	WHO	World Health Organization
		WSP	Water and Sanitation Program (World
MFI	Microfinance institution		Bank)
MICS	Multiple-indicator cluster survey		
NGO	Non-governmental organisation		
OBA	Output-based aid		

Glossary¹

Advocacy: An organised effort to inform and motivate leadership to create an enabling environment for achieving programme objectives and development goals. Advocacy promotes the development of new policies or changes to existing laws, helps redefine public perceptions, and influences funding decisions.

Above the line sales and marketing: Promotional methods typically involving mainstream radio, television, billboards, print and film formats, designed to reach a mass audience.

Behaviour change communication (BCC): The strategic use of communication to promote positive health, education and other outcomes.

Below the line sales and marketing: Promotional methods that seek to directly engage with target customers in person to promote products, such as an in-store/in-person demonstration of a product that consumers may wish to investigate in person.

Bridge financing: An interim financing option that allows the borrower short-term access to funds until a long-term option can be arranged. In the case of results-based finance (RBF), bridge financing can provide the borrower with funds to invest in the outputs that trigger RBF payments. The RBF payments can then help repay the bridge finance loan.

Business model: A business model defines how a business creates, delivers, and captures 'value'.

Cash subsidy (including conditional cash transfers): Funds provided in cash directly to a household towards completion of a desired activity (e.g. toilet construction), with the expectation that

the household will then use the funds toward the completion of that activity. The cash subsidy can be unconditional or conditional on a pre-defined result (results-based finance), and can consist of one, multiple, or ongoing payments. Generally employed in emergency response, recovery, and reconstruction situations.

Conditional cash transfers (CCTs) are a specific type of cash subsidy. CCTs are series of upfront cash payments for which ongoing receipt is conditional on continued performance of a measurable desired behaviour (e.g. toilet construction steps, continued toilet usage). Each subsequent upfront payment is disbursed following independent verification of past behaviour/ achievement. CCTs are usually highly restricted to the poorest and most vulnerable population segments that are unable to perform the desired behaviour without upfront cash subsidies.

Community approaches to total sanitation

(CATS): Demand-driven approach to sanitation promotion that encapsulate various approaches to community-based sanitation such as community-led total sanitation and school-led total sanitation, among others.

Community-led total sanitation (CLTS):

A rural behaviour change approach for ending open defecation through community participation. It concentrates on the whole community and the collective benefit rather than on individual behaviours.

Credit by supplier: A credit scheme whereby toilets, toilet components, or services are sold to a customer on full or partial credit (instalment payments) by a supplier (e.g. retailer, mason).

¹ Many of the definitions here are reproduced or adapted from the USAID definitions in its 2018 work, *Scaling Market Based Sanitation* (for details see **Resources and further reading** at the end of section 1.1).

Customer: The household or head-of-household that purchases, uses, and oversees the construction, operation, and maintenance of a toilet. Alternatively referred to as 'consumer', 'user', or 'buyer'.

Demand activation: Direct sales and marketing activities carried out to persuade customers to convert product awareness and interest into a purchase decision.

Demand fulfilment: Activities related to the delivery of sanitation goods and services by a business to its customers in response to successful demand activation (a customer's decision to purchase).

Demand generation: Activities carried out to drive awareness of and interest in hygienic sanitation behaviours and improved sanitation products and services.

Enabling environment: A set of interrelated functions that allow governments and public and private partners to engage in a sustained and effective WASH service delivery development process. In the context of UNICEF's work, an enabling environment for WASH is one that creates the conditions for a country to have sustainable, atscale WASH services and achieve the SDGs.

Enterprise: A business that facilitates the exchange of products and services for money, between entrepreneurs (alternatively referred to as suppliers) and customers

Entrepreneur: An individual who manages one or more enterprises.

Focal point business: A business in the sanitation value chain that plays the role of primary or initial retail contact for purchase and delivery of a toilet product system to a customer.

Hardware: Physical sanitation-related technologies and/or components and construction materials in the sanitation sector, such as toilets and sewage infrastructure.

Human-centred design (HCD): An approach to problem solving commonly used in design and management frameworks that develops solutions to problems by involving the human perspective in all steps of the problem-solving process. In the case of sanitation products and services, HCD aims to develop toilet products/services that are desirable to customers, technologically feasible, and viable for suppliers to produce and delivery sustainably, by focusing on and balancing users' and suppliers needs and desires, with technical requirements for safe hygienic sanitation.

Improved toilet: A toilet that is designed to hygienically separate excreta from human contact.²

Interpersonal communication (IPC): Direct, face-to-face exchange of information, ideas, thoughts and feelings between two people or among a group of people. The exchange allows people to receive immediate response or feedback that can lead to mutual understanding, agreement and action.

Market-based sanitation (MBS): A development approach to improve sanitation in a country by building the sanitation market of goods and services for which the customer makes a full or partial monetary contribution (with savings and/or cash equivalents) toward the purchase, construction, upgrade, and/or maintenance of their toilet from the private sector. It does this by strengthening domestic private sector supply of and stimulating and activating customer demand for sanitation goods and services. It includes approaches such as 'sanitation market shaping', 'sanitation as a business', and 'sanitation marketing' (or 'SanMark').

Microfinance: Financial services for low-income individuals or those who do not have access to typical banking services, including loans, savings, and insurance. Microfinance service providers can include microfinance institutions (MFIs), commercial banks, self-help groups, non-governmental organisations (NGOs), savings and loan clubs, and others.

Microfinance institutions (MFIs): Organisations dedicated to providing financial services to low-income clients. They tend to focus on microcredit, though some MFIs also offer savings and remittance services.

Operation & maintenance: Operation and maintenance of a toilet, which includes daily use, upkeep/cleaning, repair, pit/tank emptying, and/or other aspects of faecal sludge management.

Output-based aid (OBA): A type of results-based finance in which aid is given to the implementer/local government/sanitation provider or to a household upon achievement of a pre-defined output or result. A consumer rebate (fixed amount refunded towards expense borne by an actor) is a typical example of OBA at the household level.

Performance award: An in-kind or cash award given as an incentive to an individual or a group after achieving a specified result (e.g. awards to a community upon achieving open defecation-free status).

Results-based finance (RBF): Finance that is design to achieve a desired result, rather than pay for inputs. This is a broad category of finance delivery mechanisms that includes payfor-performance, ex-post performance awards, conditional cash transfers, consumer purchase rebates, and other forms of output-based aid.

Revolving fund: A loan fund in which the loans, when repaid, are disbursed again as loans.

Sanitation market shaping: A strategy developed by UNICEF based on experiences in the health and nutrition sectors, which combines carefully targeted catalytic actions, selected on the basis of in-depth market analysis, designed to stimulate a diverse range of appropriate sanitation services, products and suppliers, and ensure the market as a whole remains healthy and sustainable.

Savings and loan groups: A group of individuals living close to one another who make regular savings contributions to a central pool that lends money to the members.

Social mobilisation: A continuous process that engages and motivates various inter-sectoral partners at national and local levels to raise awareness of, and demand for, a particular development objective. This approach focuses on people and communities as agents of their own change, emphasises community empowerment, and creates an enabling environment for change.

Toilet product system: An on-site toilet facility used for capture and storage of human urine and faeces. Unless specified otherwise, the term 'toilet' in this document refers to the complete interface (e.g. slab, pan, water closet) and associated substructure (underground) components.

Throughout this document, 'toilet' is used in place of 'latrine', for consistency and regional universality, even if 'latrine' was used by the original source.

Upgradeable toilet: A toilet design that allows the customer to add to existing components or replace them with superior or higher quality materials for increasing utility, convenience, or appeal in a way that caters to a wide range of income groups via flexibility for customisation (e.g. addition of tiles to a cement slab or replacement of a thatch roof with a tin roof). Subsequent investments usually build upon the initial one so that, in principle, very little or none of the customers' money or effort is 'wasted'.

Village savings and loan associations (VSLAs):

A form of saving and loan group, in which a group of people save together and take small loans from those savings. The activities of the group run in cycles of one year, after which the accumulated savings and the loan profits are distributed back to members. The purpose of a VSLA is to provide simple savings and loan facilities in a community that does not have easy access to formal financial services.

Voucher: A subsidy provided in the form of a printed coupon or ticket that entitles the holder to a discount on, or that can be exchanged for, specific goods or services from a sanitation provider. The subsidy amount is transferred by the implementing organisation to the sanitation provider after the voucher has been redeemed and the underlying activity pertaining to the voucher has been performed.

1 Introduction

- 1.1 Practical guide to market-based sanitation programmes
- 1.2 Overview of the guidance

1.1 Practical guide to market-based sanitation programmes

Background

UNICEF has committed to support the global achievement of Sustainable Development Goal (SDG) target 6.2 by 2030, which calls for access to adequate and equitable sanitation and hygiene for all and an end to open defecation. While UNICEF will rely on proven strategies such as demand creation and systems strengthening to help governments ensure delivery of sustainable services at scale, new accelerators are needed. One of the key programming approaches adopted in UNICEF's *Strategy for WASH (2016-2030)*³ is to build sustainable markets for sanitation goods and services by working with the private sector.

What is market-based sanitation?

Market-based sanitation (MBS), an umbrella term that includes approaches such as 'sanitation marketing' (SanMark), 'sanitation market shaping', and 'sanitation as a business', is a strategy governments and development partners can use to build sanitation markets to improve sanitation in a country. MBS refers to the development of a sanitation market in which the user makes a full or partial monetary contribution (with savings and/or cash equivalents) toward the purchase, construction, upgrade, and/or maintenance of a toilet from the private sector. The aim of MBS programmes is to increase sustained access to and use of basic sanitation with a focus on low-income populations. It does this by supporting sustainable, competitive businesses to better reach and serve the unmet sanitation needs of low-income households.

MBS programmes work with local government, businesses and households at the same time to link and expand supply and demand for basic sanitation. MBS helps businesses profitably and sustainably

deliver and sell affordable toilets and related services, so that households can easily get the 'good toilet' they want, for a price they are willing to pay, and helps customers to get the finance they need to make the purchase. At the same time, it supports local government to take the lead in motivating households to prioritise this investment, while ensuring competition and quality. MBS helps to develop and link demand and supply by:

- Using market development and market facilitation investments, to support local businesses to expand the delivery and sale of affordable, desirable toilets and related services;
- Using social marketing, commercial sales and small business marketing techniques to activate household demand and increase willingness to purchase and invest in durable, hygienic toilets.

MBS and other market mechanisms can play an important role in the sanitation policy and programming mix where conditions are right (addressed in 2.1 Assessment). But developing the market does not replace governments' 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.

MBS includes a sub-set of systems-level strategies aimed at creating a conducive business environment for sanitation markets (see below and Figure 1). UNICEF refers to this sub-set as 'sanitation market shaping', defined as a combination of targeted catalytic actions, selected

based on in-depth market analysis, designed to stimulate the wide availability of a diverse range of appropriate and affordable sanitation services, products and suppliers, and ensure the market as a whole remains healthy and sustainable. More details can be found in UNICEF's 2018 Sanitation Market Shaping Strategy Brief⁴.

Why consider a market-based approach?

Sanitation markets in which customers seek to purchase their own sanitation systems from local businesses have delivered much of the basic sanitation gains achieved in many developing countries. However, these markets are often limited in their reach, are inefficient, and face numerous barriers to scale and expansion. They also often perform poorly at serving the needs of lower-income populations.

Sanitation markets exist in every country and context in the world, from low to high capacity as well as emergency settings and fragile states. This does not imply that MBS approaches will be useful and applicable in every one of these contexts. In this guide you will find the tools you need to assess sanitation markets across different contexts and decide whether an MBS approach could work.

Commitment to equity and gender

If a market-based approach to sanitation is considered, it will be essential to promote and monitor equity within the expanded sanitation market, to ensure the poorest and most vulnerable are benefitting from increased access to basic sanitation services. This is a core UNICEF mandate and commitment as the UN agency responsible for upholding the Convention on the Rights of the Child. It will also be essential to consider gender inequities to ensure MBS programme investments contribute to progress towards gender equality (or at least that they do no harm).

In this guide, equity and gender-responsive MBS programming actions are highlighted in each relevant stage of the programme cycle, with

specific reminders and tips for each stage of MBS. There is also a dedicated section on market-compatible consumer subsidy and financing tools to reach the poorest in market-based interventions (see 3.5 Reaching the poor through consumer financing).

Government sanitation goals

MBS helps governments to reach their sanitation goals in three fundamental ways. First, it leverages household investment in an improved toilet. Second, it leverages domestic private sector investment and builds local private sector capacity to deliver more affordable, desirable improved toilet options to more people and places. This can lead to a domestic sanitation industry with greater resilience, sustainability, and capability. Third, by helping sanitation markets function more effectively and broadly to serve low-income households, governments can achieve the programmatic principles of sustainability and scale, more equitably and inclusively:

- Sustainability: MBS programmes support businesses to sell affordable, desirable toilets and related services to low-income households where they can do so profitably, sustaining and growing sanitation businesses so that they can continue serving customers over time and after initial programme interventions cease. Sustainability refers to both sustained use of sanitation and sustained market availability of toilets.
- Scalability: MBS encourages greater household investment in basic sanitation and works with local businesses to respond to this new demand. After initial investments to catalyse the new market, ongoing programme investments are kept to a minimum. Supported by local, government-led sanitation behaviour change and a supportive business environment, local sanitation markets can grow and expand into new geographic areas as more local businesses take up the new MBS product system models and sanitation business strategies.

⁴ See Resources and further reading at the end of this section.

⁵ For more on country contexts and sanitation markets, refer to UNICEF's Strategy for WASH (2016-2030).

Equity and inclusivity: Encouraging those who can afford it to pay for services allows for better targeting and more efficient use of public funds towards demand creation and support to those who are truly unable to afford basic levels of service. Availability of more affordable and desirable high-quality toilet products and services in local markets close to households allows governments to design and use subsidies for the poorest and most vulnerable, to reach a greater number of marginalised households more efficiently. Investing in development of local sanitation markets expands roles for people as toilet producers, workers, retailers, sales agents and promoters, which presents an opportunity for both women and men to benefit, both financially and through learning new skills.

In addition, government and partners can remain impartial by making market information generated publicly available, to support fairness, integrity and transparency.

Understanding market-based sanitation

USAID have developed a conceptual framework that is useful in understanding the sanitation market, its key parts, and the market system in which it functions. 6 These include (1) the **context**, such as the economic environment and geographical conditions, which interveners must seek to understand but typically cannot influence, and social norms, which UNICEF has invested in influencing for sanitation, (2) the **business environment**, shaped by things such as government policy, the availability of raw materials and financial services, and access to market intelligence or small business development services, which interveners can potentially influence, depending on complexity and resources available, and (3) the core sanitation market, which is comprised of customers, entrepreneurs (business owners), and sanitation enterprises (businesses), which may be impeded from serving the sanitation needs of households by barriers that can be addressed through targeted interventions. This document concentrates on designing interventions directly in the core sanitation market,

SANITATION MARKET

Target Market System

CUSTOMER

Affordability

Affordability

Sales & Marketing

Availability

Availability

Figure 1: USAID's conceptual framework for the sanitation market

Source: USAID (2018).

primarily in rural areas, to address barriers that block households from purchasing improved toilets in a given country context. It refers to and closely aligns its terminology with USAID's MBS conceptual framework, presented in its 2018 *Scaling MBS* desk review.⁷

A change of mindset

Approaching sanitation as a market requires a shift in how we think and work. Whereas in the past, governments and sanitation programmes often looked at businesses as input suppliers and contractors, in MBS, local government engages local businesses as key partners in accelerating basic sanitation access. MBS also focuses on households as active customers rather than passive beneficiaries. It takes a user-centred and business-supplier approach to designing toilet product systems that people want and can afford, and that local businesses can also profitably deliver and sell.

	From	То
Households	Beneficiaries	Customers
Local businesses	Contractors / input suppliers	Partners / independent and viable enterprises
Implementing organisation	Project execution	MBS strategy development, testing, and scale up

Taking on new roles and functions

At the national level, government may already play a role in collaborating with and setting the 'rules of the game' for sanitation businesses, such as by setting standards and guidelines for quality assurance. At the local level, MBS programmes also broker new collaborative relationships between businesses and governments, helping to build trust and enabling businesses to service households that have been traditionally left out of the market. They do this by helping local government and development partners take on new roles in facilitating the growth of

market transactions between sanitation businesses and new household customers. Examples of new facilitating roles include:

- Helping to generate new customer demand through promotion of sanitation products;
- Linking businesses to households that are ready to purchase;
- Building skills and providing local market intelligence to help businesses respond to new customer demand;
- Supporting competition in the market;
- Developing capacity for monitoring service quality, to protect consumers and public health; and
- Exploring and developing finance options for both businesses and customers.

Supporting government to build capacity to take on MBS roles in facilitating, regulating and monitoring the new sanitation market ensures that suppliers can continue to grow their businesses and reach more consumers long after initial market facilitation activities are finished.

Required skills

Designing and implementing MBS interventions to fit local market conditions requires different sets of skills and expertise at different stages of the process. Skills and expertise needed in the design phase of an MBS intervention include market research, human-centred product design, construction optimisation, small enterprise business development, and sales and marketing. In the implementation phase, MBS implementing partners need field-based operational teams with strong co-ordination, supervision, and process monitoring and action learning capacity, as well as experience working effectively with local government.

Specialised technical skills during implementation include small business training, mentoring and coaching, sales and marketing, and sales data collection, tracking and analysis.

How does market-based sanitation fit with CATS?

Since 2008, UNICEF has invested heavily in 'community approaches to total sanitation' (CATS), with good results in achieving community-wide elimination of open defecation. CATS programmes are demand-driven and community-led and emphasise the sustainable use of safe, affordable, user-friendly sanitation facilities by all. UNICEF supports programming based on the CATS principles in more than 50 countries.

During this period, UNICEF has worked with governments to adjust policies away from the ineffective hardware subsidies and supply-driven construction programmes of earlier eras, building political awareness and institutional capacity for demand-led sanitation approaches. CATS programmes have shifted the focus away from 'doing' and 'building' and towards facilitating and catalysing changes in behaviours and community norms. These programmes have demonstrated strong success in mobilising community-wide action to end open defecation and have triggered

new demand for building and using a toilet. Market-based sanitation builds on this progress and shifts away from past supply-driven approaches and offers a demand-responsive, market-based approach to ensure sustained access to local market supply of affordable, desirable household sanitation products and services.

The goals and many of the principles of MBS are compatible with those of CATS (see Table 1 below). In sanitation, catalysing changes in social norms around open defecation and toilet use and developing local markets are the most promising approaches to establish and sustain long-term safe toilet usage for communities. It is not a question of 'behaviour or technology': achieving basic sanitation for all requires both. Both CATS and MBS are demand-driven and encourage communities and households to decide how to solve their own sanitation problems, meaning that both need local government mobilisation and good community leadership to work. Both approaches depend on government to take an active role to reach scale and sustainability. Critically, both approaches view programmes that supply subsidised or free

Table 1: Comparing goals and principles of CATS and market-based sanitation

Aspect	CATS	Market-based sanitation
GOAL	Eliminate all open defecation	 Uptake and sustained use of basic sanitation by all Increased local availability of basic sanitation products and services
KEY PRINCIPLES	 Demand-driven Households choose what they want to build No direct hardware subsidies to households Intervenes at the community scale Gets people on first step of the sanitation service ladder Attention to equity Includes all households in changing open defecation behaviour and social norms Engages government as a key partner Builds local community capacities to ensure sustainability 	 Demand-driven Households choose what they want to build No direct hardware subsidies to households Intervenes at both the community AND individual household scale Gets people on basic (or limited) step of the sanitation service ladder Attention to equity Explores financing interventions to reach very poor households, and sustained social subsidies for the poorest of the poor Engages government AND private sector as key partners Builds market capacities and household investment to ensure sustainability

hardware directly to households as problematic, because they often ignore the need for behaviour change and limit the numbers of households that can be reached. Both approaches have demonstrated success on their own; combining them could be highly effective where conditions are right. Such favourable conditions are explored in 2.1 Assessment.

Considerations for combining CATS and MBS

CATS and MBS complement each other and together can accelerate achievement of basic sanitation within the same geographic areas. In practice, however, programmatic aspects of CATS and MBS regarding start-up times, techniques, geographic scales, required skills, and results timeframes (see 2.2 Planning and budgeting) mean that integrating the two approaches into a single programme can pose operational challenges. MBS planning and operational aspects should be carefully considered, including how to integrate and sequence MBS and CATS activities within your rural sanitation programming.

For example, MBS is often presented conceptually as following CATS – the prevailing logic being that the first task is to change community norms and behaviours. In fact, CATS and MBS 'sequencing' has two different dimensions to consider which challenge this thinking:

execution of activities required to effectively develop and implement MBS and CATS on the ground in a new geographic area under area-wide programming. For MBS, substantial start-up time and investment is needed for research and strategy design and testing before implementation can begin. Implementation needs to occur across a large population base from the start, with business capacities and commitments ready to cover the target area. For CATS, much less time is needed for start-

up and testing, and the programme can initially target just a few communities, expanding as and where capacity to trigger develops. The mismatch in timing and geographic scale mean that MBS programme development activities should start as soon as possible, and before CATS start-up in new areas if the desire is to link implementation in communities on the ground, so that businesses are ready to provide the 'right' products and services at affordable prices when community demand is generated from CATS activities.

• Linking community-level work: This refers specifically to the timing of CATS triggering and MBS product and business introductions within a particular community. That is, when do we 'introduce' a product promotional event, a new set of products, or a local small business who supplies them – before, after, or perhaps even during a CATS triggering event? After a village is declared open defecation-free? Here there is less systematic evidence, but experience points to a mix of workable models and flexible adaptations to fit local context.

Since markets are broader than individual communities, it is simply impossible to confine MBS activities to specific communities. In practice, MBS may not always be suitable in all CATS programme contexts, just as CATS may not be suitable in all MBS programme contexts.⁹

These and other considerations will need to be weighed up by UNICEF and its partners to determine whether, where and how MBS might be most effective in your country context. Answering these questions forms the basis of MBS programming, and the core of this guide – an overview of which is set out in the next section.

⁸ For further discussion of the evidence and considerations for linking CATS and sanitation marketing approaches, see UNICEF's 2013 Sanitation Marketing Learning Series Guidance Note 10: Sanitation Marketing and CATS (details in Resources and further reading).

⁹ CATS and MBS programming are also explored in more detail in 2.1 Assessment, as well as in Plan International, UNICEF and WaterAid's 2019 *Guidance on Programming for Rural Sanitation* (details in Resources and further reading).

Resources and further reading

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WHO (2018). *Guidelines on Sanitation and Health.*Available at: https://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1

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Websites

UNICEF: 'Sanitation Marketing Learning Series Guidance Notes' (numbers 1-10). Available internally for UNICEF staff at: https://unicef.sharepoint.com/sites/PD-WASH/Sanitation%20 and%20Hygiene/forms/AllItems.aspx

WSP: 'Sanitation Marketing Toolkit'. Available at: https://www.wsp.org/sites/wsp/files/Sanitation%20Marketing%20Toolkits/toolkit/home.html

1.2 Overview of the guidance

What is the purpose of this guidance?

This guidance aims to provide practitioners with simple, easy-to-follow and evidence-based resources to plan, design, implement and monitor MBS interventions that build the market for sanitation goods and services, as part of comprehensive and context-specific sanitation programmes to achieve SDG 6.2.

It is organised around the project cycle, to help you plan and organise key activities needed to design and implement effective MBS interventions, to build sustainable sanitation markets that reach the unserved. These actions are not intended as a strict blueprint or model to follow. Rather, they suggest a process for systematically determining whether a market-based approach is suitable within your programme context, and if so, how to design the MBS programme's core sanitation market development strategies to fit the sanitation market conditions and enabling environment in your country.

The guide provides examples from different contexts, offering tips and advice based on current evidence and experience. Much of the guidance draws from the global evidence base on rural sanitation and is therefore focused on rural settings, though some approaches may be applicable in small towns or peri-urban environments. The guidance also draws on UNICEF's experiences shaping markets for health and nutrition supplies and the evidence generated from this work. The guide builds on important existing guidance materials such as USAID's Sanitation Marketing for Managers and WSP's Sanitation Marketing Toolkit. 10 The guide can be used to gain a better understanding of the overall

MBS approach, and to learn the practical steps involved in designing and implementing an MBS programme for different contexts in your country.

The guide will be useful for those just beginning to consider MBS, as well as those who already have MBS initiatives underway. In either case, we recommend reading every section in this MBS guide before beginning work, to gain a thorough understanding of how intervention design and implementation build and rely on the cumulative outcomes and insights of each previous section. Reading the full guide before beginning will help you understand the types of activities, tasks, and skills and resources required to systematically plan for and implement MBS.

How does this guidance fit with other sanitation guidance?

A key lesson from large-scale sanitation programmes is that one approach, or even one combination of approaches, will not work everywhere. Contexts vary, conditions and capacities evolve over time, and different populations (and groups within these populations) face different challenges and have different priorities. UNICEF's work in sanitation has traditionally focused on rural areas, where the majority of the unserved live. Experiences show that most large-scale rural sanitation programmes use aspects of the following implementation approaches, adapted to context:

- Community-based behaviour change, such as CLTS
- Market-based sanitation and technical support
- Sanitation finance and other support to the disadvantaged

While some success has been achieved combining approaches, the universal access and higher level of service required by the SDG sanitation target will require programming that is more comprehensive, inclusive, effective and sustainable. This means that sanitation programmes should also address hygiene behaviour change, environmental sanitation, and strengthening the enabling environment.

In 2019, UNICEF, Plan International and WaterAid jointly developed Guidance on Programming for Rural Sanitation and Guidance on Costing of Rural Sanitation Approaches. These documents encourage the development of rural sanitation programmes that are large-scale and area-wide, comprehensive, adapted to context, evidencebased and designed to achieve equitable and sustainable outcomes and services. 11 We recommend that readers review the content of these two core documents before reading this MBS guide. This MBS guide should be read as a companion piece, providing more detailed and specific operational guidance for the design and delivery of MBS interventions in relevant contexts. The guide also consolidates and updates UNICEF's Sanitation Marketing Learning Series Guidance Notes from 2013, 12 drawing on new experience and lessons.

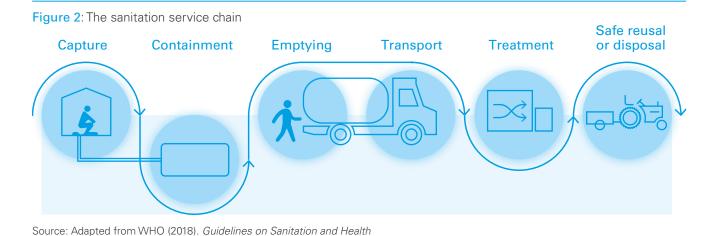
This guide aligns with UNICEF principles on market shaping and will inform and complement sanitation market shaping approaches as these are developed and tested over the coming years.

Who is this guidance for?

The primary audience for this guide is practitioners: programme implementation actors, including UNICEF country offices and government partners, non-governmental organisations, and other support agencies and consultants working to improve sanitation services. Within UNICEF country offices, the guidance is aimed primarily at WASH and supply colleagues, though other programme colleagues may also find it useful. Throughout the guidance, the term 'you' is used to refer to the reader, referring to people directly planning, managing, implementing, or supervising MBS initiatives. It may also be useful to agencies funding MBS programmes during appraisal of project proposals, to determine whether they contain robust designs, adequate durations, good implementation monitoring, and the necessary activities and budgets to achieve successful MBS development outcomes.

What is the guidance's scope?

The guide focuses on designing a coherent set of MBS strategies to directly engage with businesses and their household customers to build sanitation markets within sanitation programmes, primarily but not exclusively in rural areas, with the aim of achieving sustained household and community-wide sanitation outcomes. It is not focused on institutional, public or large-scale urban sanitation infrastructure (such as sewerage networks).



¹¹ Details for both of these guidance documents are in Resources and further reading at the end of this section.

¹² See Resources and further reading at the end of this section.

Within the domestic sanitation market of a country, typically there are different sub-markets for the three essential sanitation service chain functions of: a) faecal capture and containment, b) faecal waste emptying and transport, and c) faecal waste treatment and disposal/reuse.

In a market context, capture and containment is the package of purchased goods and services needed to build a particular toilet design, including its containment sub-structure, referred to together as a toilet 'product system'. Different toilet product systems can be thought of as different combinations of construction materials, pre-fabricated components (e.g. sanitary ware, concrete pit lining rings, platforms) and construction services (e.g. pit diggers, masons). They must be assembled at the customer's home and installed correctly in order to provide access to safe faecal capture and containment at a minimum basic level.

The scope of this guide is primarily focused on the toilet product system for on-site capture and containment, since this is the critical public health issue in rural contexts (as well as many small towns and informal urban settings), particularly as it relates to ending open defecation and ensuring access to basic sanitation.

Although many of the market-based principles and design processes here can be adapted to address urban sanitation problems and the other sub-markets of the sanitation service chain, this guide focuses mainly on MBS approaches for delivering on-site sanitation in rural and peri-urban environments.

This guide does not comprehensively cover how to combine MBS approaches with other sanitation approaches, though some guidance on CATS and MBS complementarities is provided. For more information on combining sanitation approaches, refer to the *Guidance on Programming for Rural Sanitation* published by UNICEF, Plan International and WaterAid. ¹³

What is the MBS process?

This guide is organised around the programme cycle to help you plan and organise key activities needed to design and then implement effective strategies for MBS. It captures the essential elements of successful MBS programmes that have accelerated rural sanitation coverage gains across large geographic areas. It is an evidence-based method to systematically build a strong MBS programme to fit the market conditions and enabling environment in your country and captures best practices of successful MBS programmes to date. The process takes an iterative approach to designing and testing what works, in which programme strategy decisions made in each successive programme design activity depend on outcomes, insights and design decisions accumulated in previous design activities. There is a period of 'trial-and-error' or 'learning-by-doing' built into both the design and implementation phases of the process. Because MBS relies on market research to determine which strategies are likely to work best in the context of your country, no two country programmes will be identical.

The MBS process is structured around the programme cycle, with three main phases: 1) planning, 2) programme design and 3) implementation. Each part of the process is important and builds on earlier work done: for example, high-level planning precedes market research, market research informs good design choices, and field-based testing and refinement of design decisions are critical for successful implementation. There is no need to duplicate work that has already been done in the country within each stage: for example, if others have done good market research studies, or consumer-driven product systems have already been designed and market-tested, make sure this work is identified and incorporated into your programming planning from the outset. If an area of programming has never been undertaken in your country or context, it is best not to skip it, since this can cause problems during implementation. As with most approaches, sector co-ordination and government engagement from the start will lead to the best results.

Figure 3: The MBS process

PLANNING PHASE

Carry out an assessment and start planning to lay the groundwork for your programme design:

- Assess whether MBS is right for your context and where conditions are most favourable to begin (2.1 Assessment)
- Develop a plan and budget for where and how to begin (2.2 Planning and budgeting)

PROGRAMME DESIGN PHASE

Design and test the most appropriate and context-specific MBS intervention strategies, informed by market research, for the core sanitation market, and to address the business environment as needed:

- **Conduct market research** to diagnose market shortcomings, identify incentives and opportunities, understand consumer preferences, local businesses and supply chains, and select the target market segments and initial options for designing your MBS intervention (3.1 Market research)
- **Product system design**. Develop the right toilet system packages and services for the selected target market to address the users' entire toilet experience (3.2 Product system design)
- Delivery approach and business model design. Design and test the best ways for focal point
 businesses to deliver the new product packages and services profitably (3.3 Delivery approach &
 business model design)
- **Demand activation**. Design and test best ways to reach and motivate customers to invest in basic sanitation and purchase the new product systems (3.4 Demand activation)
- **Consumer financing**. Consider a range of financing options and market-compatible social subsidy approaches to reach the poorest to include to MBS programme strategies once the core intervention design is working effectively (3.5 Reaching the poor through consumer financing)
- Forthcoming sections
 - **Expanding access to business finance**. Consider ways to expand affordable working and growth capital for entrepreneurs to invest in the sanitation enterprise (*forthcoming*)
 - **Optimising market interactions**. Improve sanitation market dynamics by reducing transaction costs, improving market information flows and balancing supplier and buyer risks (forthcoming)
 - Market enablers. Consider ways to improve the business environment through changes to market rules, government policies, standards and regulation (forthcoming)

IMPLEMENTATION PHASE

Carry out an assessment and start planning to lay the groundwork for your programme design:

- **Implementation**. Bring it together in a full-scale MBS programme, with new roles for different market facilitation actors (4.1 Programme implementation)
- **Monitoring**. Keep learning what works by actively monitoring and adapting your programme (4.2 Monitoring)

While the MBS process is based around the concepts and stages of the programme cycle, its ultimate goal is much broader and longer-term; to create and sustain robust sanitation markets that will continue to serve communities. It is essential to build in an 'exit' strategy for UNICEF's handson involvement in the market, transitioning from intensive market development to a more robust and sustainable sanitation market.

MBS works best when it is planned from the start to work at scale and to collaborate on market research and strategic design activities. MBS is about catalysing and facilitating the growth of sanitation markets – that is, helping the private and public sectors to work together to deliver services to households on their own, to accelerate basic sanitation gains. From the start and throughout the process you should consider whether your new market facilitation strategies and activities pass 'sustainability' and 'scalability' criteria. Questions to consider may include:

Sustainability

Can businesses continue to sell their sanitation products and services profitably to customers without the need for ongoing external donor finance? Are businesses, sales agents and others suitably motivated and incentivised to continue promoting and supplying customer demand? Are households provided with all the product information they need to properly install, use and maintain their toilets over time?

Scalability

Are new toilet product systems attractive and do they meet the needs and context of a large target population? Are project activities cost and time efficient? Can they be efficiently replicated on a larger geographic scale? Are tools and systems simple enough to be used by second- or third-generation programme staff and local partners?

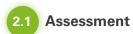
How long does it take to reach scale in MBS programmes?

USAID's 2018 MBS desk review¹⁴ found that successful MBS programmes require funding for six years or more to achieve results at large scale. New toilet sales in these longer, successful programmes begin to accelerate four to five years after initial design stage. Amongst large-scale programmes, on average, 90 per cent of toilets were sold from year 4. Therefore, it will be important to secure at least five years of initial funding for a new MBS programme, ideally with additional commitments through years 6 to 10. As toilet sales accelerate around year 4 to 5, cumulative MBS programme expenditure per person gaining access to basic sanitation drops steadily, reaching less than US\$10 around year 6 to 8 in the most successful large-scale programmes in Asia. Data suggest timeframes to reach scale may be longer and MBS programme unit costs higher in sub-Saharan Africa than in Asia – however, these data in sub-Saharan Africa are from MBS programmes with durations of four to five years or less.

What is involved at each phase?

Planning phase

Carry out an assessment and start planning to lay the groundwork for your programme design.



To begin, you will assess broad market and partnership conditions to decide whether and where to initiate work with sanitation markets in your country. You may also need to build understanding among sector stakeholders about what MBS is (and what it is not). In the assessment phase, you will scope the landscape of potential opportunities and favourable conditions for doing MBS. This includes the enabling environment, potential partners, and available funding sources and skills.

This information can help you to decide if a marketbased approach makes sense and if so, where to start (a potential outcome of your assessment might be the decision not to move forward, because market or other conditions are currently not favourable enough for MBS to work).

2.2

Planning

Depending on the results of your assessment, if you decide to move forward you will begin to develop your plans, general timing, and rough budget for the remaining phases and activities of your MBS programme.

Programme design phase

Design and test appropriate and context-specific MBS strategies for developing the core sanitation market (see above), informed by market research (to identify the target market, and strategic insights, opportunities and options), and address the business environment, as needed.

3.1

Market research

Good market research is the foundation of any market-based approach. It involves qualitative as well as quantitative methods and requires a national perspective. In this activity, you will assess your market shortcomings and their root causes, and identify distinct market segments and the strategic insights, opportunities and options for developing the rural sanitation market. You will start to define and understand your target market - their desires, needs, priorities and practices as well as how they purchase durable products they want. You will also identify and understand the main businesses already involved in supplying toilets to rural households or those that could potentially become involved - what they offer, how they operate, and how they link together. Market research will allow you to clearly identify the target market, set the strategic direction, and obtain detailed information needed for the critical design decisions and testing during programme design.

3.2

Product system design

This activity considers the product system by exploring available toilet products systems and developing designs will that fit your target market and market context. From your assessment and planning stage, you know what toilet technologies, construction materials, components and building services are currently available, the costs to build them in local markets across the rural landscape, and what people think about them. In many cases, what is available does not meet the needs of the target market. When this is the case, use your market research as the starting point for an iterative design process to test and refine suitable toilet product system packages¹⁵ that meet your target consumers' 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' toilet product systems, you will consider technologies, user preferences, and the capacities and needs of local businesses who 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 consumers. They should also be feasible and profitable for local businesses to offer, sell, deliver and install.

3.3

Delivery approach and business model design

You will now focus on the delivery approach by businesses. You will have already identified the target customers and the product system designs they want, and talked to existing local business owners in your initial target areas who might be able to offer them (these are your potential consumer-facing 'focal point' businesses). You will also have analysed business finances to get an idea of what product systems might cost to produce, transport and install. Now, you are ready to start testing how a focal point business can deliver these offerings in a lot more detail – to develop and test a workable business model for focal point businesses to profitably sell and

¹⁵ A toilet 'product system' refers to the package of materials, components and labour required to install, at a minimum, the toilet interface and below-ground containment sub-structure. It may or may not include the superstructure.

deliver the new toilet product system to customers. A business model defines how a business creates, delivers and captures 'value' – the benefit that customers receive by using a product or service. This will involve working with existing businesses to optimise the potential delivery approach of the new product system packages with enough profit to sustain and grow. You are looking for 'proof of concept', and still in testing phase.



Demand activation

You will now turn to activating latent demand by the customer, and sales and marketing by businesses. As you test the new product system packages and installation services, and work with focal point business owners on their initial business models, you will also need to identify local actors to be community sales agents/promoters (also called 'demand activators') and start developing and testing promotional and sales activities. Local sales agents and other promoters will need promotional and marketing concepts, materials and activities to use in community meetings and in door-to-door visits, to create new awareness of the product system options and generate new toilet sales for focal point businesses. You will use commercial and social marketing techniques as well as customer insights you have gathered to address three communications objectives: 1) stopping open defecation; 2) motivating household investment in a durable, hygienic toilet; and 3) generating sales by creating customer awareness of the new product systems packages, their prices, the focal point businesses who make and sell them, and how to order and pay. Because this is still part of programme design, at this stage you are trialling and testing what works, including the messages, activities, and sales agent actors most suitable for reaching and 'activating' customers in your initial target market to purchase.



Reaching the poor through consumer financing

This section of the MBS guidance explores making sanitation more affordable to the customer by presenting an overview of consumer financing and subsidy options for reaching the poorest within MBS programmes.

By investing in product design and business model improvements, MBS makes basic sanitation more affordable and accessible to low-income households. However, even after successfully reducing market prices and improving market access, some households – especially the poorest – may still find it difficult to purchase basic sanitation. This section presents a range of consumer financing and market-compatible social subsidy options to reach these target groups and ensure they have access to the new market. During the programme design phase, consider which of these mechanisms will be considered and when.

Expanding access to business finance (forthcoming)

This forthcoming section, which will be developed and published as an addition to this guidance, addresses capital and viability of the entrepreneur. The lack of access to affordable working and growth capital to invest in the sanitation enterprise is a common barrier that frequently hinders entrepreneurs from entering or operating more effectively and efficiently in local sanitation markets. At this point, you will examine how sanitation enterprises typically source their funding and the key factors that limit their access to capital in the form of equity or debt from the formal financial sector. To facilitate access to capital from diverse sources, a range of approaches can be considered such as low-interest or guaranteed loans, blended financing, or impact investing. This element of the MBS design process will help you to identify opportunities for UNICEF to pilot or support the scaling up of promising models in their respective local contexts.

Optimising market interactions (forthcoming)

This forthcoming chapter, which will be developed and published as an addition to this guidance, addresses the transactions between the customer, entrepreneur and enterprise in the core sanitation market. There will be opportunities to improve sanitation market dynamics and incentivise sanitation enterprises, through catalytic interventions that improve the exchange of products and services between entrepreneur and customer.

This chapter reviews approaches to reduce transaction costs, improve market information flows and balance supplier and buyer risks, and how to anticipate benefits or drawbacks in your context. It leverages lessons learned from interventions that have been trialled in sanitation markets, as well as from market shaping approaches that have been successfully implemented at scale in other sectors, and discusses how these can be adapted to the sanitation context.

Market enablers (forthcoming)

This forthcoming chapter, which will be developed and published as an addition to this guidance, will consider the sanitation business environment. The market research and industry consultation may identify market barriers linked to market rules, government policies, standards and regulation. This part of the design process considers why and how to work with governments to explore these barriers and seek solutions to strengthen the local sanitation market, by improving the overall business environment. For example, you might support to governments to set appropriate policies, incentives, standards and guidelines. This could include product standards, quality assurance systems, regulation and enforcement, or consumer protection. You may also choose to explore research and development, or investigate the impact of value-added tax and import duties on sanitation-related commodities and services.

Implementation phase

Put it all together into a full-scale programme and keep learning what works by actively monitoring and adapting.



Implementation

Once you have designed your intervention, you are ready to bring all the elements together into full-scale programme implementation, to facilitate sales and drive uptake in the new sanitation market. To launch the new MBS programme approach, start in

an area of reasonable scale. The programme should roll out the newly designed and tested strategies and activities in a co-ordinated way. During implementation, you will need to consider how the programme trains, supports and monitors different actors, including local government, and ensures good co-ordination and timing of all activities.



4.2 Monitoring

Although presented last here, programme monitoring should begin at implementation, so you will need to begin planning your monitoring approach before you begin implementation. Implementation activities will evolve quickly, especially at the start, and will require responsive and flexible management as the programme evolves. Active, hands-on, frequent monitoring every week initially – is essential for programme management teams and will help you adapt and adjust your strategies as the market responds (or fails to in some places). A strong system for monitoring business profitability and performance, toilet product system sales and installation, and household uptake will be essential to help the programme learn quickly, replicate good ideas, and course correct as needed.

The role of government in MBS

You should involve sub-national and local government actors who are responsible for sanitation in MBS intervention communities in the implementation and monitoring phase of MBS, as it will help ensure the long-term sustainability of MBS investments in building sanitation markets. The sections on implementation and monitoring examine their roles and functions in detail. Government partners at national and sub-national level and other sector stakeholders interested in MBS programming should be consulted during the planning phase, and on decisions and strategic outcomes during market research and product system design. This guide considers ways to engage government in these decisions in each section.16

¹⁶ UNICEF's 2013 Sanitation Marketing Learning Series Guidance Note 6 (in Resources and further reading at the end of this section) provides a detailed discussion of the roles and responsibilities of government, from national to local level, in the development of rural sanitation markets in MBS.

How to use this guide

This guide can be used to design a full-scale programme from the very beginning, or to adjust elements of an existing MBS programme. Whilst we recommend reading the whole guide regardless of whether you are just starting out or are considering MBS, or you already have an MBS programme underway, you may want to focus on specific areas of the guidance, depending on what stage you are at in your MBS programming. Consider where you are in your programming to decide where to focus:

If	Focus on:	
You are considering an MBS approach, but you are not very clear on what is involved	The full guidance. Begin with planning and move through the guidance. Pay close attention to the planning phase to determine whether	
You have decided to try MBS, and you are just beginning to design your strategies	and where to start, and to plan and organise for the design and implementation phases.	
Vou house on engaing MPS	Start at market research and focus on ensuring that all aspects of programme design have been considered.	
You have an ongoing MBS programme, but you want to strengthen it or make it more sustainable	Use the market research methods to identify market shortcomings, review your product options, business delivery approach, and demand activation strategies to see if they are meeting customers' needs and are profitable enough for businesses. Consider additional actions to address the market structure and business environment.	
Your MBS programme is	Start with implementation and monitoring. Focus on evolving your strategies as the market matures and strengthening your monitoring systems to understand market trends.	
working reasonably well, but you are concerned mainly about broadening its scope	Consider adding customer financing options to ease the burden of up-front purchase and/or market-compatible social subsidies to reach the poorest.	
and reach	Consider how to further optimise market interactions, address the broader sanitation business environment, and remove remaining barriers to business finance.	

The main sections of the MBS guidance follow this introductory chapter. You will find details for planning, organising and budgeting for your MBS programme, including estimated time needed for each task and important issues and tips to carefully consider in preparing plans and budgeting. These sections also explore the roles, functions, and responsibilities of UNICEF country offices in the execution of the activities and tasks of each phase of the process, should you decide that MBS is the right approach for the rural context in your country.

Can MBS advance gender equality?

Any sanitation programme has the potential to reinforce negative gender norms, roles and stereotypes. On the other hand, successful MBS programmes are an opportunity for new sanitation business opportunities and income for rural people

- for example, as toilet component producers, skilled masons, transporters, retailers, sales agents, and other market players. It will therefore be important to understand the different needs and roles of women and men as consumers, users and caretakers of improved sanitation facilities in the home, as well as the functions women play now (or their absence) in the sanitation supply chain during the planning phase before designing your MBS strategies. Where feasible, avenues and opportunities to expand women's roles in the sanitation economy should be examined and explored, so they too might benefit financially and by learning new skills. These efforts will increase the likelihood that your MBS programme makes a positive contribution towards gender equality and avoids unintended negative effects. Specific guidance on gender considerations at each phase in the programme cycle are outlined next page.

Table 2: Gender considerations in the MBS process

Phase	Activity	Specific gender consideration
Phase 1: Planning	Assessment and planning	Seek out gender-disaggregated data on sanitation coverage, access and use and gather gender-specific outcomes from prior MBS experiences, sanitation market demand and supply studies, and studies of sanitation consumer behaviour. Identify gender-responsive issues for attention and action in subsequent phases.
		in subsequent phases.
	Market research	Assess whether existing household gender roles and responsibilities in the current toilet pathway to purchase process (i.e. deciding, choosing, purchasing, installing) and subsequent use, operation and maintenance of installed toilet designs result in poor outcomes for women and girls, regarding access, usage and/or burden of housework. Observe and ask about what roles, activities and jobs women are doing in the sanitation supply-chain now, including supporting roles of wives and daughters of male business owners working in the family sanitation business.
Phase 2: Programme design	Product system design	Ensure the needs and preferences of women and girls, along with those of men and boys, are equally explored, understood and addressed in product system design and testing, by including women consumers, as well as men, from different socio-economic strata in the iterative design and testing of product systems in the MBS programme.
	Demand activation	Ensure that the portrayal of women and men in sanitation communication or marketing materials does not reinforce negative gender norms, roles or stereotypes. Make efforts to recruit and train women as well as men for paid promotion or commissioned sales positions, and consider gender differences in training.
	Implementation	Consider ways to leverage and enhance women's roles in purchase decisions and to share the economic benefits of MBS activities such as toilet marketing and sales, production and retail, and business expansion.
Phase 3: Implementation	Monitoring	Ensure gender disaggregated data collection on household toilet coverage and usage, and on the economic benefits of increased toilet sales, by tracking gender proportions of sales agents, owners/co-owners of focal point businesses, and associated growth in toilet sales, as well as of other paid (and unpaid) front-line actors in the new sanitation market.

Resources and further reading

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UNICEF: 'Sanitation Marketing Learning Series Guidance Notes' (numbers 1-10). Available internally for UNICEF staff at https://www.ntefs.harepoint.com/sites/PD-WASH/Sanitation%20and%20Hygiene/Forms/AllItems.aspx





2 Planning

- 2.1 Assessment
- 2.2 Planning and budgeting

2.1 Assessment

Quick reference

Decide whether and where to start MBS. • Collect and review existing data and information to assess market conditions What is involved? Review government policies and existing programmes for alignment with MBS Consult with national and sub-national government and other stakeholders to improve understanding and assess their support for starting MBS Consensus on whether and where to proceed with an MBS approach What are we trying Improved understanding of the approach, and how it fits within broader to achieve? government policies and strategies How long will it take? 1-2 months Document review, situation analysis, and report writing What skills and resources are required? Presentation and meeting organisational skills Use disaggregated rates of rural household adoption of improved toilets. unimproved toilets and open defecation, by wealth or income quintile to assess demand-side market conditions and potential market size Obtain the most recent national data for the household poverty income threshold and rate of poverty across administrative levels **UNICEF** equity and gender reminders • Seek out gender-disaggregated data on household sanitation coverage, access and use, and gather gender-specific outcomes from prior MBS experiences, sanitation market demand and supply studies, and studies of sanitation consumer behaviour Identify gender-responsive issues for attention and action in subsequent phases

Overview

Strengthening sanitation markets requires a long-term approach and effort. To begin, you will need to decide whether and where to initiate work in sanitation markets, together with the government and other partners. The assessment and planning activities are essential, as they will help you make important decisions about where to focus and identify the enablers and challenges that you will encounter in each context.

For your assessment, you will collect and review existing data and information to assess market conditions, and review government policies and existing programmes for alignment with MBS. You will consult with national and sub-national government and other stakeholders to improve understanding and assess their support for starting MBS. If you decide to proceed with an MBS approach, you will need to decide where to start, and then plan and budget for the design of your programme, plan your partnerships and collaborations, and start thinking about mobilising funds and resources for design and implementation.

If you are already working with MBS in your country, you may still wish to revisit your assessment to review your decisions about targeting and update your programme planning and design accordingly.

Deciding if and where to start

To assess opportunities for MBS in your country, you should carefully consider the consumer demand and supply-side market conditions, as well as government policy and programme context. Conducting the three tasks below will help you to decide whether and where to start MBS.

Task 1: Decide whether to initiate MBS by considering favourable and challenging conditions

The first task is to decide whether conditions are right to initiate MBS at all. Consult available secondary data and talk to stakeholders and informants to assess whether the broad national/sub-national and government policy and programme conditions are generally favourable for MBS at country level and in the particular region/s where you want to work (see Table 3). This includes:

- Consulting national census data, large-scale household sanitation and living standards surveys, poverty and socio-economic statistical data, which can provide good high-level sources for understanding general demand-side market conditions.
- Consulting JMP and equity data to get a general understanding of the size and scope of potential target markets, including rates of open defecation, and access to improved and unimproved toilets by household wealth or income quintile.
- Compiling and mapping, where possible, population data sets and sanitation access rates at the lowest administrative level for which geographic information system (GIS) location layers are available. Include road networks and market town location layers. This will help you start to understand how core demand and supply conditions vary across different contexts. These data sets and GIS mapping layers will be valuable for further planning, should you decide to progress with MBS. They will also help you

- during your market research, as you estimate the number of households in different market segments, if you decide to move forward.
- Ensuring you utilise the knowledge within your team, which can be an important source of demand and supply-side information. You can learn a lot about local markets for construction products by talking to your operations and supply colleagues, who are often in direct contact with importers, distributors, and retailers of common materials used in toilet construction.
- Consulting with relevant national and subnational government and other development partners to assess the level of understanding and views on MBS and hardware subsidies.
 More advocacy and information sharing may be needed to build consensus for the approach.
- Speaking to economic and construction industry experts, who may have information on some of the supply and demand-side conditions, and the general enabling environment for rural markets and market investment.
- Conducting a rapid field visit, if time allows, to get a rough picture of the demand and supply side conditions on the ground in the region you want to work in.¹⁷
- Using existing tools to understand the policy environment, institutional arrangements, and existing roles and capacities of government counterparts and other sanitation partners.¹⁸
 This will help you to determine partnership opportunities and who might be best placed to take on different sanitation market development and facilitation roles.

Once you have carried out initial scoping exercises to assess what favourable and challenging conditions exist for starting MBS programming in your country, you can move on to Task 2 to decide where it might be most successful to start. Table3 next page outlines a range of potential favourable and challenging conditions which should form the basis of your decisions on whether and where to begin MBS. There is no strict 'rule' on how many

¹⁷ More guidance and tools on situation analysis and assessment for MBS can be found in USAID's *Sanitation Marketing for Managers guidance* (see Resources and further reading at the end of this section).

¹⁸ Such as UNICEF's Sanitation Marketing Learning Series Guidance Note 6: Enabling Environment (see Resources and further reading at the end of this section).

Table 3: Favourable and challenging conditions for starting rural MBS

FAVOURABLE CHALLENGING

WHERE TO START MBS

National / sub-national:

- Political and economic stability
- Economic growth, rising incomes
- Increasing media, information exposure
- Large proportion of rural mid- to upper-income quintile households without basic sanitation (i.e. large potential new customer market)

National / sub-national:

- Political and economic instability
- Declining incomes
- Cut off from outside information exposure
- All but rural poorest income quintile households have basic (safe, hygienic) sanitation

WHETHER & WHERE TO START

Government policies and programmes:

- Rural policy that encourages household investment in individual household toilets
- Rural policy that discourages free or subsidised hardware, except in cases of extreme poverty
- Flexible policies on designs of improved toilets
- Provincial or district government leaders giving priority to basic sanitation and open to marketbased approach
- Policies, institutions, or programmes that support local enterprise development (e.g. technical support, small business support, reasonable taxation, etc.)
- Favourable regulatory environment for importing goods

Government policies and programmes:

- Large-scale rural direct hardware subsidy programmes underway in many districts, provinces
- National government policy and budgets prioritise widespread use of large hardware subsidies¹⁹
- Strict enforcement of sanitary technology regulations or criteria that require expensive toilet designs (e.g. on-site sanitation must be a septic system)
- Opposition to a market-based approach by government or major donors
- Excessively high tariffs and duties on imported materials and components for sanitation

WHERE TO START – DEMAND-SIDE MARKET CONDITIONS

Community-level:

- Close to roads, market centres
- Larger, denser communities
- Evidence of 'positive deviance', (e.g. self-financed 'early adopters' of improved toilets)
- Higher proportion of households with favourable characteristics (below)

Community-level:

- Remote from roads, market centres
- Small, isolated
- Deep-rooted cultural beliefs against toilets
- High proportion of households with challenging characteristics (below)

Household-level:

- House with some modern construction materials (e.g. cement, bricks, iron sheet)
- Buying some consumer durables (e.g. furniture, TV, battery)
- Access to water supply
- Source(s) of cash income (e.g. remittances, trading, wage labour, surplus crops)
- Stable residence and secure land tenure

Household-level:

- Subsistence living (little to no cash income)
- Traditional construction only
- Nomadic or seasonally mobile
- No space to construct a toilet
- Do not own land / house property

¹⁹ It may be possible to support government to consider re-programming these budget items as pro-poor targeted consumer financing options or output-based aid that are compatible with an MBS approach.

FAVOURABLE CHALLENGING

WHERE TO START – SUPPLY-SIDE MARKET CONDITIONS

Technology solutions:

- On-site sanitation systems are feasible public health solution
- Hydro-geologic and soil conditions do not require excessively expensive or complex technologies

Technology solutions:

- Safe pit emptying and faecal sludge disposal are the critical sanitation public health challenge
- Difficult hydro-geologic or soil conditions likely to require complex, costly technical solutions²⁰
- No space to construct a new toilet

Product system options:

- Potential options for lowering product system costs, improving desirability can be found
- Low-cost product options exist in nearby countries with similar cultural practices and preferences

Product system options:

 Lower cost product system options have been heavily subsidised in the target area, and cannot be re-designed to raise consumer appeal

Supply-chains:

- Sufficient number of importers, distributors and retailers of construction materials operating in the country (even if not well-networked)
- Existence of some businesses supplying improved toilet building products and services
- Commercial transport options exist
- Masonry/concrete casting skills exist
- Adequate formal or informal financial services for small enterprises

Supply-chains:

- Little or no supply of key construction inputs, equipment (e.g. moulds for concrete components) at country-level
- Monopoly or shortage conditions that result in price-fixing, excessive costs for construction materials, sanitation components
- No businesses supplying toilet building materials or services
- No construction materials or concrete-related building services within commercially viable transport distance
- Little or no masonry or concrete casting skills in the area
- Development programmes (e.g. government, NGOs) have severely disrupted or distorted local toilet supply chains or prices

OTHER FAVOURABLE FACTORS

- Sector partners and donors willing to collaborate or share costs for MBS start-up investments in market research, product design, business model testing, or developing consumer financing options
- Reputable microfinance institutions in target area providing finance to small enterprises
- · Reputable microfinance institutions in target area willing to test consumer loans for toilets

conditions should be favourable in order to decide to proceed; rather, rely on the collective expertise and experience of you and your partners to make these decisions. Note that Table 3 is primarily focused on guiding decisions about MBS in rural areas; while the criteria may be useful and apply to other contexts, urban contexts will require other considerations, such as those related to faecal sludge management.

The absence of some favourable conditions or the presence of some challenging conditions do not necessarily indicate that you should not proceed with MBS. Rather, the existence of more favourable and/or less challenging conditions should guide your initial selection of where to start. Challenges, especially with supply-side market conditions, are unlikely to exist across the whole rural landscape: many can be overcome by well-designed MBS

interventions and can be investigated further during your market research (see 3.1 Market research). For example, if a large hardware subsidy programme is the stumbling block, your research and subsequent work can build the case and engage government for re-programming hardware subsidies to support market access and choice for the poor. In cases where the government subsidy programme delivers low quality construction or solutions that do not meet users' sanitation needs, this may not be a barrier to MBS development. For example, PSI's MBS programme has been successfully working at scale in Bihar, India, alongside the government's large-scale toilet subsidy programme, in part by offering a higher quality toilet system while ensuring it aligned with the government's preferred technology prescription.

Task 2: Identify provinces or districts with more favourable conditions

When initiating MBS for the first time in a country or in a new programme area, start where conditions are favourable (see <u>Table 3</u> above). This will improve your chances of success and allow you to learn by doing. It will also build a strong base of knowledge, skills, local business partners and experience for expanding into more challenging areas in the future. Keep in mind that favourable areas for MBS might not overlap with all CATS programme areas, and that not every ODF community may be favourable for MBS start-up (see <u>Table 4</u> next page).

In evaluating conditions for starting MBS in rural areas, you should be thinking in relative terms about physical proximity to market infrastructure (i.e. rural market centres, permanent roads, secondary towns/cities) and household-level demand-side market conditions across the rural landscape. For example, to help decide where to start MBS in rural Bihar, India, PSI developed proxy indicators of the relative favourability of household demand-side conditions and combined them into an 'ease of conversion' score applied to groups of households, aggregated at sub-district level.²¹

If you have a CATS programme, use the criteria in Table 3 above to assess whether favourable market conditions exist across your CATS programme area. In some cases, communities where you are using CATS may also be favourable for MBS, but this will not always be the case – or conditions may be favourable in certain districts, but not all of them. Many of the favourable community-level characteristics for successful CLTS triggering are challenging conditions for MBS (see Table 4 next page). If this is the case, consider choosing other districts or geographic areas within your districts that have the most favourable conditions. Once your market development model is further developed, you can expand your support to geographic areas with communities that have more challenging market conditions, over time.

You should also consider evidence of sub-national government interest and leadership in sanitation when selecting the provinces/districts in which to start. Engage relevant government authorities early on to build MBS interest, understanding and partnership support.²² Always keep the national perspective in mind when you are planning for the beginning of your MBS approach, and focus on demonstrating proof of concept that can be taken to scale.

Task 3: Select the geographic area with the most favourable conditions for initial large-scale proof-of-concept development and testing

Though you will need to work at province or district level to demonstrate successful market development and build government support for the approach, initially, you will want to select a smaller concentrated target area with favourable conditions for initial development and testing, or proof of concept. Although the goal is an MBS programme at scale, it will be important to test new product systems and get proof of concept for the new delivery approaches, business models and demand activation tactics you develop during the

²¹ See Figure 9 on p21 of USAID (2018), and also the original report: *Monitor Deloitte* (2013). Details of both in Resources and further reading at the end of this section.

²² For more on building interest and engagement in MBS see *Annex 1: Advocacy for MBS*, in the accompanying *MBS Guidance: Annexes* document.

Table 4: Favourable and challenging community conditions for successful CLTS triggering and for starting MBS

CLTS HANDBOOK	MIS-MATCHED FAVOURABLE COMMUNITY CONDITIONS FOR CLTS AND MBS	STARTING MBS
Favourable conditions for ODF triggering	 Small size community Remote from towns and big roads Socially and culturally homogenous, cohesive Unprotected water supplies Where diarrhoea rates are high 	Challenging conditions for starting MBS
Challenging conditions for ODF triggering	Large settlementClose to towns and roadsSocially and culturally diverseProtected water suppliesWhere people are relatively healthy	Favourable conditions for starting MBS

programme design phase, before moving into a full-scale programme implementation. It will therefore be important to identify potential geographical areas with the most favourable conditions that are most likely to bring you some early successes; once the first businesses start selling and early customers start buying, support and momentum will grow.

Because of the nature of markets and marketing, working across 10 or 20 villages is not enough. Your initial proof-of-concept geographic area for MBS needs to have a large enough market size. As a rough rule of thumb, plan to ensure you include an area (which may cut across districts) that has at least 200-500 communities, that are not too far from roads and market centres, in rural regions where population densities are relatively higher and basic sanitation coverage is low. For an example of applying these considerations to select an initial programme area, see Case study 1, which illustrates how the NGO WaterSHED selected an initial programme area in Cambodia.

MBS works best when you are thinking and working at scale, both for impact on sanitation coverage and because markets and businesses cannot be artificially confined to limited geographic areas. You should target an entire geographical area and all the communities within it, rather than selecting a small number of geographically dispersed communities. Businesses should not be confined to working in pre-determined 'programme' communities and should be encouraged to service all communities and households they can profitably reach within or even outside target areas. Start in areas that are on or close to main roads and near supply chains and market centres. This is because, when you scale up to large scale implementation, your work will begin by building supply chains and addressing barriers on the supplyside. As the programme progressively expands, the network of suppliers, businesses and distributors will grow and expand outwards from rural centres of commerce and small towns along roads towards more challenging areas.



Case study 1

Assessing and deciding where to start MBS in Cambodia: WaterSHED 'Hands-off' experience

In 2008-09, the NGOs iDE and WaterSHED assessed conditions for starting MBS in Cambodia. They found that an initial challenge was a large-scale Asian Development Bank (ADB) funded programme that supplied rural households with subsidised latrines built by contractors. The subsidy programme spanned five neighbouring provinces, covering two thirds of Cambodia's then-population of 13.4 million people (see Figure 4).

At the national level, however, conditions were generally favourable for MBS: strong economic growth, increasing household consumption, political stability, and low rural access to improved sanitation.²³ Other promising signs for MBS were the high percentage of household toilets in use in rural areas which had been delivered by the

private sector, despite the presence of subsidised hardware in the country, as well as a successful rural MBS project in neighbouring Vietnam – a country with similar sanitation cultural preferences and close economic ties.

iDE and WaterSHED decided national-level conditions were favourable to proceed, but that they would avoid the ADB-funded programme provinces in choosing where to start. WaterSHED launched discussions with Ministry of Rural Development (MRD) officers responsible for rural sanitation at both national and provincial-level to begin planning, and Kampong Speu province was identified as a potential place to start. The province had a high proportion of poor households compared to other provinces, but high population density, and is bisected by a

Figure 4*: Subsidised toilet programme area, Cambodia, 2009



national highway – strong conditions for rural market development. WaterSHED's strong relationship with provincial government in Kampong Speu also provided a good basis for a partnership to develop and pilot the approach. The provincial government also had sanitation programming experience with a large, four-year CLTS programme in Kampong Speu, and while positive changes had occurred in some CLTS villages, there were sanitation challenges that MBS had the potential to address. CLTStriggered households almost exclusively constructed unimproved dry pit latrines, and while these latrines helped initially reduce open defecation, they were unpopular, because they did not allow for the longstanding cultural practice of anal cleansing with water. However, the provincial government was unfamiliar with MBS and doubted that low-income

rural households would invest in improved sanitation without hardware subsidies such as the ADB-funded programme.

Once the provincial government was convinced to proceed in Kampong Speu, WaterSHED explored where the most favourable conditions were for MBS across the province. Using GIS layers and secondary data sets, including geo-referenced administrative boundaries, village point locations, road networks, and population data, as well as input from provincial officials and rapid field visits, the team chose a 10 km-wide strip on each side of the national highway as the MBS pilot area (see Figure 5). It included 537 villages and over 55,000 households, covering 41 per cent of the total population of Kampong Speu.

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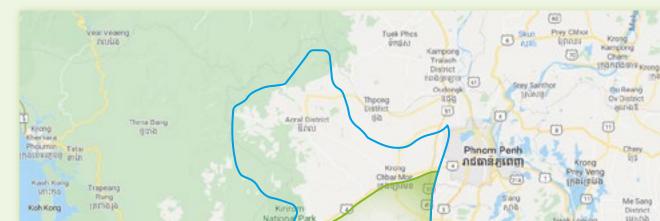


Figure 5*: Kampong Speu province (blue) and the MBS pilot area (green)

MUNICIPALITY

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^{*}The designations employed in this publication and the presentation of the material do not imply on the part of the United Nations Children's Fund (UNICEF) the expression of any opinion whatsoever concerning the legal status of any country or territory, or of its authorities or the delimitations of its frontiers.

Advocacy and creating buy-in for MBS

Government and other partners in the sanitation sector may have little understanding of what MBS is. Explaining to them what it involves and why investing in MBS is needed is a crucial part of your planning and preparation process. One of the first steps for creating an enabling environment for carrying out MBS is to organise an initial workshop with government and other key partners, to introduce and discuss the MBS approach and best practices in this guide. Early consultations with any partners or agencies that may have tried MBS before is strongly recommended, so that lessons and concerns can be addressed in these very early stage meetings. Annex 1: Advocacy for MBS lists some of the key rationales for carrying out MBS that may be useful in your discussion with government and other stakeholders, as well as some points to counter common arguments against it.

If the decision is made to go forward with an MBS programme, it will be important to keep national and sub-national government and other development partners engaged in the programme planning, and the design process which follows. This can be done by:

- Engaging key government partners on strategic decisions at key points to ensure agreement, get input and build increasing ownership for the programme. For example, you could consider setting up a small steering committee of key stakeholders to guide the process.
- Sharing evolving plans and outcomes with the broader group of government partners and sector stakeholders at key points in the MBS process, especially during market research and product system design, which should be viewed as sector-wide public good investments for developing the national rural sanitation market. This can be done through meetings or workshops, but also through email updates to sector stakeholders, through blogs, or via other sanitation sector networks available in the country.

- Considering the use of local government field-level sanitation officers and/or implementation partner field staff to assist in some of the market research and participate in product system design. This can build hands-on understanding of MBS and create strong advocates for explaining and supporting the approach.
- Considering exchange visits to take government partners to visit successful MBS programmes in neighbouring countries in your region. This is a great way to build understanding and interest during or even before MBS design work begins. During its programme design stage, WSP facilitated an exposure visit to Cambodia for national, provincial and district officials from Lao PDR. The visit allowed Lao PDR officials to talk to their Cambodian counterparts about practical issues and to see mature MBS programmes in action.
- Making a head-start on activities in order
 to build some quick wins and provide early
 evidence. For example, UNICEF Sierra Leone
 worked with government to undertake
 consumer and supply chain sanitation market
 research, then presented early findings in a
 national workshop to build understanding and
 momentum for their next steps.



Box 1: Ghana's experience building stakeholder capacity

To kick-start MBS efforts in Ghana in 2015, UNICEF worked with national government stakeholders to deliver a one-week orientation and training package for national, regional and district government, as well as other implementing agency partners. The workshops included:

- A clear articulation of how the sanitation marketing approach fits within Ghana's rural sanitation model and strategy, and how it complements ongoing CLTS efforts
- An overview of the rationale, key principles and activities involved in developing and implementing an MBS programme
- Presentations from implementing agencies on current and past interventions, including mason training, village savings and loan initiatives, and others, to understand what is already working in rural Ghanaian contexts
- Facilitated discussions to address stakeholder concerns about the approach, and to clearly differentiate sanitation market facilitation from

- previous 'SaniMart' physical demonstration sites and past hardware subsidy programmes
- Intensive 4-day training for implementers and consultants on how to undertake each design element
- A presentation from the market research firm on the work plan, approach and steps for undertaking planned national market research

The workshops included district environmental health officers from the Environmental Health and Sanitation Directorate, district engineers from public works, and district business advisory centre officers from the National Board for Small Scale Industry. The inclusion of business development officers has proved particularly strategic: for the first time in Ghana, these officers were included as part of the core district team undertaking market research and strategy design, under the banner 'Sanitation is Everyone's Business.' Their perspective and skill set are a new addition and complement those of 'traditional' WASH players.

Resources and further reading

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Market%20Based%20Sanitation%20JUNE2018.pdf



2.2 Planning and budgeting

Quick reference

What is involved?	 Plan and budget for the programme design phase and, in some cases, develop a rough plan and budget for implementation 	
What are we trying to achieve?	 Partnerships and collaborations to undertake key activities Mobilisation of funds and resources to continue design and implementation, if the decision is to proceed 	
How long will it take?	1-2 months	
What skills and resources are required?	 Document review, situation analysis, and report writing skills Presentation and meeting organisational skills Planning and budgeting skills 	
UNICEF equity and gender reminders	 Identify gender-specific issues for attention and action during subsequent programme design and implementation phases Ensure a balance of men and women on the team within UNICEF and its implementing partners 	

Overview

At this stage, you have decided to proceed with an MBS approach, have identified a geographic area with favourable sanitation market conditions for starting, understand what work will need to be done to improve the enabling environment, and have reviewed the programme design and implementation phase sections of this guide to understand what needs to be done and in what order. You will carry out market research as the critical formative research step of the programme design phase, to generate the information, data and insights to identify the best opportunities and evaluate options for key design phase decisions. Market research helps you to identify market shortcomings and their root causes, and to select the target market segment(s) and will provide the information and insights to inform the design of suitable product systems, delivery approaches and business models for focal point businesses, and demand activation activities. You will now

need to develop and plan market research and the other programme design phase activities, as well as setting a budget for your MBS programme, beginning to think about mobilising funding and resources, and considering what partnerships and collaborations will be necessary.

Planning for programme design

The design phase is focused on developing the right interventions for actors in the sanitation market to address barriers across the sanitation market system, beginning with market research and moving systematically to determine the target market and the product system, delivery approach, and sales and marketing strategy to best reach them. You will also be considering financing for both consumers and businesses, as well as other changes to the business environment and sanitation marketplace that can optimise transactions and catalyse greater investment.

You should give yourself at least 12 months and up to two years for design and testing. After market research, the programme design activities will all involve iterative testing of promising options. You will need to check with target customers to see what is working throughout the process. This should be done by field testing and trials with consumer-facing businesses and their nearby communities with favourable demand conditions (as set out in Table 3 above - 'Community-level'). Note that each aspect of the core sanitation market must be considered in order: you cannot design product systems without knowing who they are for. And you cannot consider how businesses will deliver and sell products if you do not first define what the product system offering will be. It is recommended that you move systematically through market research and product design, then conduct delivery approach and business model design in parallel with demand activation. This will help you structure trials to jointly test delivery of the product systems with the sales and marketing activities in selected communities as a joined-up simulation of what your actual implementation might look like.

Think of the entire programme design phase as peeling back the layers of an onion: iteratively getting a deeper and more refined understanding of how the new sanitation market will function to better reach low-income households through your programme. In this sense, you can expect and plan for some overlap: these are not discrete, standalone activities.

In the programme design phase, the outputs and decisions can serve as programme milestones. Plan for a major milestone at the end of the design phase, to include 1) the detailed workplan and refined budget for large-scale pilot implementation, and 2) the outcome targets expected by the end of the large-scale trial:

1. Workplan and budget: An output of the design phase will be refined work plans and budgets that are more detailed than your original estimates. You can expect that there may be some need for revisions to your initial budget, so building in this milestone is essential.

2. Outcome targets: Do not attempt to set firm sales, sanitation coverage or other implementation phase targets at the very start. The initial implementation phase results framework should include the indicators you want to measure (see 4.2 Monitoring), baselines (if known), and – if strictly required by the funding agency – general estimates for targets. The major design phase milestone will include setting and agreeing on the final implementation phase targets.

Planning for programme implementation

During implementation, you should plan to launch in an initial focus district or province to demonstrate an intervention delivered at some scale, starting in an area with the most favourable conditions, then rolling out across the pilot area, and eventually expanding to a much broader geographical area over time. The programme will need to evolve, through trial and error, based on how the market responds to the initial interventions. A review of mature MBS grant-funded interventions found that programmes that had achieved scale had durations of five to seven years and that 90 per cent of programme outputs (measured by toilet sales) occurred after year four. In general, you should plan for at least three years of implementation to fully see the impact of your strategies (see <u>Table 5</u> next page).

MBS programmes do not typically launch implementation everywhere all at once. Getting started is often the most difficult part and will require start-up investments such as heavy recruitment and convincing of sceptical businesses or government officials. Market dynamics will change, and your programme will need to evolve along with them. Plan for progressive roll out, following the principle of starting where conditions are most favourable in all cases. MBS is a learning-by-doing approach, so plan to do some intensive support at the start. Things will move faster as you get going. Section 4.1 Programme implementation provides guidance on the key start-up implementation activities you need to be planning for.

Table 5: Overview of timeframes and resources required

Phase	Activity	Indicative timeframe	Resources/skills required
Planning (6-9 months)	Assessment, planning & budgeting	2-3 months	 Document review, analysis, and report writing skills Presentation and meeting organisation skills Planning and budgeting skills
Design (at least 1 year)	Market research & target market selection	4-6 months	 Qualitative and quantitative research Small- & medium-enterprise (SME) business analysis Strong methodology, research plan and question guides
	Product system design	3-4 months	 Qualitative research & product design skills Industrial design/engineering skills Clear design brief Strong methodology, fieldwork plan and user testing guides Adequate work space and budget for materials, labour and tools to prototype
	Delivery approach & business model design	3-6 months	 Business model design, financial analysis, and SME development skills Private sector experience 'Business Model Canvas' and other business model design tools One or two pilot businesses to engage in testing Budget for testing and trialling, including small batch production, distribution and sales
	Demand activation		 Communications design, rural direct marketing and sales skills Clear creative brief(s) based on market research findings and new product system offerings Budget for creative design and pre-testing with target customers, front-line sales promoters and focal point businesses
	Consumer financing	6-12 months, throughout design and/or implementation phase(s)	 Financing and policy analysis skills Social policy expertise Private sector experience, business design and financial analysis skills Plan for evidence generation and learning
	Expanding access to business finance		
	Optimising transactions		
	Market enablers		
Implementation At least 3 years initial duration (at least two harvest seasons)	Programme implementation - Large-scale pilot (first 12 months) - Progressive expansion	2-3 years	 Finalised implementation workplan and budget Business and market development skills Communications execution and planning skills Clear procedures and suite of accompanying tools and templates for field operations Training budget and field-tested training materials for delivering required training to different actors Programme management, field supervision, co-ordination and monitoring Strong government leadership
	Monitoring		 Monitoring and programme management experience Frequent tracking of sales, quality and customer satisfaction Simple data collection systems & forms Database and data entry skills and tools

Options for planning and budgeting

There are two ways that you can go about planning and budgeting for your programme. Which way you choose will depend on existing partnerships and country-level commitment to MBS, as well as available resources.

Option 1: Plan for design and implementation at the start

Where momentum and commitment at country-level for MBS exists, broad plans can be made to undertake both the programme design and the implementation phases of the MBS process, assuming these have not been done before. Organise your work plan to include programme design and implementation phases with a planning horizon of no less than five years.

By the end of the programme design phase, you should have: 1) a detailed work plan and refined budget for large-scale pilot implementation, and 2) the outcome targets expected by the end of the large-scale trial.

In the implementation phase, you will roll out the programme, progressively expanding across a large-scale pilot area and to new geographical areas over time. The overall outcome of a five-year programme should be the successful achievement of all targets, and a detailed plan and budget for national replication and scale-up across a large number of regions. This will include the core package of proven MBS interventions in the core sanitation market, as well as complementary strategies to support the market to reach remaining households within your existing programme areas.

Option 2: Plan in stages

In some cases, it may make sense to focus in detail initially on planning and budgeting for market research and product system design. These insights can then be used to develop plans and budgets for the rest of the programme design phase. UNICEF Malawi broke down the design phase in this way for their MBS programme (see <u>Case study 2</u>, UNICEF Malawi's experience next page). It is also possible to focus on executing market research only, before

planning for the subsequent activities of the design and implementation phases.

While market research and product system design can be broken down into discrete activities with separate planning and execution, it is recommended that the rest of the design phase is planned and budgeted for as a single package. This is primarily because: 1) the skills required for market research and product system design are very specialised, and 2) these two activities will produce outputs (market research reports, final product system offerings, indicative guidance on focal point business delivery models and demand activation) that can be considered national public goods and which, once completed, do not need to be duplicated.

By contrast, the rest of the programme cycle involves designing and then implementing a coordinated set of activities to market, sell and deliver new product systems to target households in a specific area. The same core team should be responsible for all the remaining inter-related design and implementation stages. The final outputs of the programme design phase will include the operational details, such as the detailed workplan, budget, co-ordination mechanisms and staffing needed to run the programme.

Regardless of how the early activities of an MBS programme are packaged, by the end of the design stage, you must plan to have: 1) a detailed implementation workplan, 2) an implementation budget and 3) final outcome targets for implementation.

Case study 2 UNICEF Mal

UNICEF Malawi's approach to planning and developing a rural MBS programme

By 2013 Malawi had over 800 open defecationfree villages, following the successful introduction of CLTS in 2008. However, the sustainability of these gains was an ongoing challenge. In 2011, UNICEF Malawi began work to develop a 'national rural sanitation marketing programme' (NRSM) to support the Government's ODF strategy. The strategy aimed to address concerns about the temporary and unsafe nature of many latrines built in CLTS villages, while supporting the Government of Malawi's policy of shifting away from construction subsidies to a market-based approach. While there were many unknowns, the goal was to develop a programmatic approach for MBS that would be financially and logistically replicable by district governments across Malawi. With a national focus in mind, three geographically dispersed districts (out of the 12 districts where UNICEF was supporting CLTS implementation) were selected for initial development and testing. The three districts captured a variety of environmental, socio-economic and cultural conditions and included both lakeshore and interior areas, and districts with and without high risk of latrine collapse from sandy soils – a key challenge in Malawi for constructing durable latrines.

Drawing on guidance and best practices in USAID's Sanitation Marketing for Managers²⁴ programme development manual, as well as successful district-based MBS experiences in Asia and Africa,²⁵ a five-phase design and development plan was prepared. Flexibility and adaptation were built into the process to allow for adjustment of phases as learning advanced. The scope of work, timeframe and budget were developed initially for the first three phases, with phases four and five planned to follow them, as below:

- **1.** Market research, to understand sanitation supply and demand (three months' duration).
- 2. Product design and development, using 'humancentred design' principles (two months' duration).
- 3. Marketing strategy development, and national dissemination and sharing of the evidence and results from the first two phases. Included preliminary decisions related to product designs, pricing, and locations, as well as promotion of the approach in the context of the Government's ODF strategy working with government, NGOs, the private sector and university partners (two months' duration).
- **4.** Business model development, pilot testing, and supply chain development (to be determined after the first three phases).
- Financial mechanisms to support customer demand and/or supply expansion (to be determined after a successful fourth phase).

Working with a modest budget, UNICEF recruited an international consultant to work side-by-side with UNICEF staff and government representatives to plan, design and execute the first three phases, drawing heavily on buy-in and provision of staff time and in-kind resources from local district governments – seen as key partners of the approach. This served to keep costs down, tap into extensive experience and knowledge of household and village sanitation conditions among front-line district officers, and build 'learning-by-doing', and new skills for the market-based approach among district government staff.

More on UNICEF Malawi's experience implementing market research and sanitation product design are presented in sections 3.1 Market research and 3.2 Product system design.

²⁴ See Resources and further reading at the end of this section.

²⁵ For example, WSP's experiences in Vietnam and Benin. See WSP (2005) and (2010) in Resources and further reading at the end of this section.

Planning principles and tips

Table 6 below offers some tips and programming principles to consider as you begin your planning.

Table 6: Key planning tips for MBS

Parameter	Key issues	Planning tips and implications
Timing and duration	MBS programmes take time to reach scale, and for markets to evolve and respond to interventions. Sales and coverage rates are likely to accelerate after a few years of implementation. MBS demand activation, sales and marketing activities have the highest impact when they are conducted at times when people are most likely to purchase and construct – e.g. after harvests when cash income is highest and when people have more time.	 Give your programme two to three years, including at least two harvest seasons of implementation to fully assess the impacts of your MBS work. Plan for an initial programme launch when seasonal incomes are highest in your target area. Working backwards from this date, you can plan to complete all programme design activities to be ready for the peak income season. Annual sales strategy planning and targets should factor in seasonal fluctuations. The bulk of purchase and construction activity will likely occur in the post-harvest months.
Targets	The customer decision to purchase typically requires a fair amount of forethought and planning. The process of introducing new ideas and toilet product packages takes time, and usually involves 'early adopters' taking up the innovation first, followed by larger numbers over time. Market penetration is also linked to the growth and strengthening of sanitation supply chains, and the replication of business models.	Set modest programme uptake, coverage, and sales targets initially, but plan for exponential growth over time. Experience shows that sales acceleration starts after year 4 of the programme. If targets are too high at the start, your programme may feel pressure to move from market facilitation to project-based top-down implementation, which may sacrifice sustainability and scalability in the long run.
Skills	MBS requires new skills for the WASH sector, related to small business and rural market development, market research, qualitative and quantitative research and analysis, product design, commercial marketing and sales generation, and others. MBS implementation also requires a high degree of co-ordination. There are several different types of new activities that must come together in a complete package in defined locations at the same time.	 Consider what additional training, new staff, and/ or short-term technical assistance may be required for MBS design and implementation. Look beyond traditional WASH partnerships: government departments, consultants and agencies specialising in rural market development and agricultural value chains may have the skills you need. MBS implementation typically requires a very strong co-ordination function – for example a strong manager/co-ordinator role to provide strategic and on-the-ground operational oversight across all activities. MBS implementation requires dedicated teams on the ground to facilitate and broker new relationships between different market actors (e.g. local government, focal point businesses, community sales agents/promoters) and to closely track and adapt to what is happening in the market. These teams need strong operational supervision, training and flexibility.

Parameter	Key issues	Planning tips and implications
Scope and coordination	The programme design stage only needs to be done once, if done well. After the up-front investment is made in the design stage, implementation agencies can adopt and adapt the product systems and market facilitation tools and strategies.	 Take a national-scale approach to market research and product system design and invest in these as sector-wide public goods available to all stakeholders and organisations interested in MBS development. Encourage stakeholders to pool resources for programme design, especially market research and product system design. If an organisation has already invested in good quality market research and product system design work in the same area, do not do it again.
Management approach	Market-based approaches are based on local market conditions, so it is difficult to predict what implementation strategies and activities will be needed before you conduct market research and design your strategies. Market conditions and trends will change over time.	 From the outset, discuss the need for adaptive management and flexibility with donors and partners. Do not prepare a detailed implementation budget until the programme design becomes clear. Require a detailed workplan, budget and outcome targets as the core deliverable at the end of design stage. Take an iterative 'learning-by-doing' approach; monitor and test what works and be open to changes.
Equity and inclusion	The goal of MBS is to help the market to better reach and serve low-income and unserved customers. This can only happen if your programme is explicit about targeting the poor and the poorest. MBS should also ensure it avoids unintended negative outcomes on gender equality or other dimensions of equity.	 Use available poverty and vulnerability data to help define the scope of your MBS activities. Ensure that the bottom two wealth quintiles are consulted in consumer market research, the development and testing of new product packages, and demand activation strategies. Hold separate focus groups with them, seek them out for consumer interviews, and adjust field schedules to facilitate their participation. When consulting with household decision makers during market research and at product design stages, be sure to explore patterns of toilet usage, and reasons for non-usage, of all household members, including children, adolescent girls and boys, the elderly/disabled. Make sure you explore the method for infant faeces disposal. Plan to collect income, gender and disability-status disaggregated data on household uptake and facility usage as part of monitoring and evaluation, so you can evaluate how well the programme is serving the poorest households and contributing to gender outcomes. Disaggregate and examine sales performance data by gender for sales agents and focal point business owners.

Evolving roles and building technical capacity

Understanding who does what in the new sanitation market will take some time and experimentation. Local government and external agency roles in particular will evolve over time. During the design phase, you may rely more on technical input from external support agencies and consultants, to conduct market research and to develop and test suitable product packages, business models, and focal point businesses, as well as sales methods and promotional strategies. But even if you do rely heavily on external resources for early MBS design activities, there are many opportunities to actively involve local government (see UNICEF Malawi experience in Case study 2, above).

As part of your implementation phase planning, it is important to budget funds to train, support, and mentor local government leaders so they can take on key implementation roles over time. These roles include demand promotion activities, introductions at community and household level to local sanitation businesses as well as in business forums, and support for enforcement of quality standards and other consumer protection activities. Section

4.1 Programme implementation offers further

guidance on potential roles for different actors, including government at local and national level. Once the programme has gained some implementation experience and proof of the effectiveness of the MBS intervention strategies, and begins to scale up and replicate, sub-national and local government may take more of a lead in ongoing market facilitation, training, monitoring and other roles.

UNICEF's role

Table 7 below highlights the potential roles, functions, and responsibilities for UNICEF country offices in the execution of MBS activities and tasks. These could be on a wide spectrum: from handson planning, managing and direct execution, to providing funding or co-funding for an implementing agency to plan, manage and execute the process, to co-ordinating with other organisations to fund and execute the process independently while enabling and strengthening government to support the process. Especially when funding and contracting others to do the work on behalf of UNICEF, it is critical that UNICEF programme managers have a thorough understanding of what is involved, as well as best practices and tools to ensure and measure successful outcomes.2.1 Assessment.

Table 7: UNICEF roles in MBS

MBS phase/ activity	UNICEF country office roles
Throughout the MBS process	 Manage the partnership with government and ensure collaboration on all strategic decisions
	 Convene sector stakeholders and MBS development partners to discuss plans, get inputs and share outcomes at key milestones
	 Consider forming an MBS working group or steering committee to advise and support on the process
	 Consider funding and contracting modalities – for instance, through contracts or partnerships, directly, or through government
•••••	Directly do this in-house
Assessment and planning	• Engage with in-house supply division staff, and gender and disability focal points
	 Consult with government, partner NGOs, and sector stakeholders
	Ensure consideration of equity and gender issues

MBS phase/ activity	UNICEF country office roles
	 Plan, prepare, manage and fund a TOR (individual contract), 'request for proposals' (contract with a firm/institution), or partnership agreement with an NGO/civil society organisation (CSO) to carry out market research
Market research	Depending on the modality, help organise field work or consultations
	 UNICEF must review and facilitate partner review of market research planning, TOR, inception reports and results
	Ensure consideration of equity and gender issues
	Find and fund a partner NGO/CSO (via partnership) or institution (via contract) to carry out product system design
Product system design	 Contribute to developing the creative design brief and reviewing interim and final product system designs, consider innovations
uesigii	 Ensure co-ordination with sub-national and local government and other stakeholders interested in MBS
	Ensure consideration of equity and gender issues
Business model	 Find and fund a partner NGO/CSO (via partnership agreement) or institution (via contract) to carry out business model development and testing
design	 Ensure co-ordination with sub-national and local government and other stakeholders interested in MBS
	 Find and fund a partner NGO/CSO (via partnership agreement) or institution (via contract) to carry out demand activation design and testing
Demand activation	 Ensure co-ordination with sub-national and local government and other stakeholders interested in MBS
	Ensure consideration of equity and gender issues
Consumer financing	 UNICEF may work with governments, NGOs/CSOs, financial institutions on the design and testing of pro-poor financing mechanisms
	Via agreement with a partner NGO/CSO and in co-ordination with government and other stakeholders
Implementation	 Consider bundling design aspects into one contract or partnership, ensuring necessary product development, small business development, and sales and marketing expertise and skills are available on staff or via consultants, expert services and/or sub-contracts
	Encourage gender parity in staffing by partners where feasible
	Engage partners in other sectors to strengthen gender and equity
	 When funding a partner to carry out MBS work, UNICEF must ensure accountability for results, by doing the following:
Monitoring	 Working with the partner to develop a results framework (in line with overall country programme theory of change) and agree on report template and frequency
	 Providing supportive, hands-on monitoring with the partner(s), particularly during early implementation, to ensure flexible and adaptive programming
	Reporting internally in UNICEF systems

Resources and further reading

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3 Programme design

- 3.1 Market research
- 3.2 Product system design
- 3.3 Delivery approach & business model design
- 3.4 Demand activation
- 3.5 Reaching the poor through consumer financing

3.1 Market research

Quick reference

Gaining national perspectives on supply chains, customer segments, market dynamics, barriers and their causes Assessments to estimate market size and identify target segments (different groups of similar consumers) across the focus geographical area What does market research involve? Qualitative in-depth research to understand household consumers, and sanitation businesses and supply chains Market scans of available toilet construction materials, components, and services, as well as their costs along the entire supply chain • Defined target market segment(s) for the programme A strong understanding of household motivations, toilet design preferences and barriers to investment A strong understanding of available businesses, existing sanitation business What are we trying models, improved toilet system designs, purchase and construction materials and to achieve? processes, and drivers of total and component customer costs to build across the rural landscape • Market research will provide the detailed data, findings and insights needed to identify opportunities and develop the right product system offerings, focal point business models, and demand activation strategies for the selected target market How long will it take? 4 to 6 months (including 1 to 2 months of field research) • Qualitative and quantitative research skills, ideally also skills in geographic information systems (GIS) What skills • SME business analysis and resources are required? • Strong methodology, research plan and question guides • Outline of final report structure and headings Ensure that households in the bottom two wealth quintiles are consulted in consumer market research. Seek them out for consumer interviews and adjust field schedules to facilitate their participation When consulting with household heads and their spouses during market research, be sure to explore toilet usage patterns of all household members, including children, adolescent girls and boys, the elderly/disabled and disposal means for infant faeces, and any reasons for non-use **UNICEF** equity and • During customer interviews, assess whether current improved toilet designs result in poor outcomes for women and girls, regarding access, usage and/or burden gender reminders of housework, and why, including whether gender roles in the purchase process contribute to poor outcomes • Observe and ask about what roles, activities and jobs women are doing now in the

businesses, where they exist

construction and sanitation supply-chain, including business ownership, as well as any supporting roles of wives and daughters in male-owned family businesses

• Seek to interview female, as well as male owners of rural construction-related

Overview

Good market research to generate the information and insights for strategy design and implementation is the foundation of any market-based approach. Good market research should assess the interactions and dynamics between actors in the whole market, as well as identifying barriers and their root causes. Good market research is also actionable. In other words, it should be designed to directly inform your programme design and the roles of different actors in the market. For this reason, you should carefully read the programme design section of this guidance before beginning to plan market research, in order to fully understand the critical outputs you need from your market research to design an effective MBS programme.

Market research should be viewed as a public good – an investment to develop the rural sanitation market in your country. Thus, if your budget and stakeholder conditions permit and such a study has yet to be undertaken, do your sanitation market research at national (or very large sub-regional) scale. If this is not possible, your research should

still always take a national perspective. Use as much national secondary data as possible to frame your market research plan, select target areas for field work, and make subsequent design decisions in ways that will inform and be informed by the broader national market context (see Haiti example in Box 2).

In MBS, households are viewed as consumers of sanitation products and services, and treated as customers of sanitation businesses, rather than beneficiaries of an intervention. When low-income rural households build an improved toilet – whether it is their first toilet, a replacement, or an upgrade from an unimproved or temporary facility – they are making a significant investment decision. To motivate households to spend hard-earned money and effort on an improved toilet, the first step is to understand them better.

The first objective of market research is to **define** and understand the target market for your MBS intervention, including customer needs, motivations and preferences, as well as the overall likely market size. You will need to learn what



decision-makers and their spouses in your target households think and worry about; what they value, believe, and want for their family; what toilet features they care about; and what motivates or prevents them from investing in an improved toilet. You will also need to understand their priorities and practices, and how they currently purchase durable products that they want.

The second objective is to identify and understand the main businesses already involved in toilet construction on both a local and national scale, including what they offer, how they operate, who they serve, and how they link together. To work with businesses - whether they are large distributors and manufacturers, customer-facing retailers and small local concrete block casters, or very small service providers and masons - your programme must understand what they need, worry about, and what drives them. You will need to understand what would motivate a business to take on the sanitation business opportunity in their local market or expand the sanitation activities they do now, what is currently preventing them from reaching and serving your target households with the toilet product systems they want, and how sanitation fits into their broader business activities. You may also choose to assess businesses that are not currently involved in sanitation but with the potential to become involved.

The third objective is to **understand the business environment** and factors that may be facilitating or hindering interactions between consumers, entrepreneurs, and enterprises. These factors may include lack of market information, policies or standards, mechanisms for partnership between public and private actors (such as public-private partnerships (PPPs) or service-level agreements), or access to finance for businesses and households.

The insights you gain from market research help you identify and begin to develop the 'right' product systems for target market consumers, the 'right' focal point businesses and business models to reach and effectively deliver the product systems to them profitably, and the 'right' messages, channels and sales techniques to motivate them to decide to invest and purchase. Your market research will guide your focus in all aspects of your programme design:

- Product system design: Market research
 will help to identify and develop one or two
 affordable, desirable basic sanitation system
 options, with the key features that target
 consumers want, that can be easily purchased
 and quickly installed.
- Delivery approach and business model design: Market research will help you identify which local focal point (consumer-facing) businesses to work with and guide the development of sanitation business models that will allow these businesses to profitably produce, sell and deliver the new product systems efficiently to target consumers.
- **Demand activation**: Market research will help you identify and develop the marketing and sales communication strategies, messages, channels and actors to reach and motivate target households to invest in basic sanitation and to introduce and sell the new product packages directly to them.
- Consumer financing: Market research will help you identify the financing options and marketcompatible social subsidy approaches that might be introduced during implementation to reach the poorest.
- Expanding access to business finance:
 Market research will help you identify the
 options for expanding affordable working and
 growth capital for entrepreneurs to invest in the
 sanitation enterprise.
- Optimising market interactions: Market research will help you identify the barriers in the market, such as high transaction costs, poor market information flows and imbalanced supplier and buyer risks, which you can address during implementation.
- Market enablers: Market research will help you identify areas for improving the business environment to have the biggest enabling effect on sanitation enterprises, such as changes to market rules, government policies, standards and regulation.

Conducting consumer research with households

What do you need to know? Three core research questions

- 1. For consumers in your target market, what is a 'good' toilet, what features and functions should it have (and not have) and why, and how much should it cost?
- 2. What would consumers and their families gain personally from having and using a good toilet, compared to what they have and do now for defecation?
- **3.** How can you make the process of learning about, purchasing and installing a good toilet a lot easier, quicker, and more reliable?

To answer these questions, your market research should explore:

- Household income, purchase priorities and general purchase behaviours;
- Current defecation practices and toilet usage of all household members:
- Knowledge of and preferences for different toilet technologies, designs, features and materials (e.g. tile floor, wood seat, pan material);
- Willingness to purchase and pay for different types of toilet facilities;
- Knowledge of locally available toilet designs, cost to build, businesses who sell;
- Intention, motivation and triggers for improved toilet ownership;
- Decision-making, purchasing and construction processes and costs (including transport) and durations for building existing toilet systems;
- Barriers to purchase and finishing installation;
- Access to and interest in financing options such as microfinance or instalment payment; and
- Cleaning, maintenance (including practices, preferences, intentions and options for dealing with full pits/tanks) and upgrading of existing facilities.

Gathering consumer insights

Consumer research uses qualitative research methods first and foremost, such as in-depth interviews and discussions, focus groups, observations and informal assessments. Extended one-on-one interviews with household heads are the best way to gain insights about what people want and need for their family and to understand their past choices. Small focus group discussions with no more than eight carefully selected participants can also work well, but require more skill to run effectively, and may be better suited to explore emerging design ideas and options in later phases of field work, as was done in Haiti (see Box 2).

When you meet and talk with consumers, it is important to assume nothing, and to ask open rather than leading questions. The emphasis is on asking 'why?' to probe deeply into the reasons behind people's actions, beliefs, hopes and fears and then listening to what they actually say. Interviews and focus groups can include the use of photos and images of common toilet types and feature options, or construction and delivery methods, to probe specific product knowledge, preferences, and perceptions around prices and affordability. While a central focus should be on the toilet sub-structure and interface, also investigate superstructure design preferences and perceptions.

Have discussions with owners of different types of toilet designs, including improved and unimproved, and with those who have no facilities at all. Avoid households who own toilets provided by a subsidy programme or organisation. Include a mix of male- and female-headed households, and men and women, to understand differences in their views. Speaking to self-financed toilet owners is particularly important to understand the current consumer 'pathway to purchase' (see Figure 6), including what local sanitation constructionrelated businesses and transport methods exist and where these businesses and providers are located relative to each community. These local businesses and transporters will be a key starting point for the supply-chain market research, so keep a running list including their names, contacts and locations. A deep understanding of the 'pathway to purchase' and the local landscape of available



customer-facing construction and transport businesses will be fundamental for identifying opportunities to make the process easier, quicker and more predictable (in terms of cost, time, effort and quality) for households.

Sampling households, communities, and regions

In general, your qualitative research plan will include a 'stratified' sample of toilet owners and non-owners from a range of households, including different livelihood sources and income levels, demographic profiles, and ethnic and cultural backgrounds. Your sample of households will be spread across communities selected to represent

different geographic 'market proximity segments' (based on closeness to/remoteness from existing market infrastructure and supply chains) in different sanitation contexts across the rural landscape. Thus, a first step in planning market research is to divide all of the rural landscape into broad geographic 'market proximity' segments (see Box 2).

Tips for developing geographic 'market proximity' segments:

 By 'market infrastructure', we mean the inter-connected system of larger centres of commerce, small rural market towns and the transport routes that connect them to each other and to surrounding rural communities.

- Conduct scoping and consult with rural experts, sub-national and local government officials, and rural-focused businesses to estimate a rough 'buffer' zone of geographic proximity to key market infrastructure. The buffer zone could be the distance from 1) a road, 2) a rural market town, and/or 3) a large rural centre of commerce, within which rural communities have regular and easy access to an existing market town/centre and its transport systems, for any kind of goods.
- Buffer zones will depend on topography and road infrastructure. For example, in the mountainous areas of rural Haiti, communities located beyond two kilometres of a year-round road were considered remote from any market unless they happened to be near a centre of commerce. On the other hand, in Cambodia's central plateau, rural communities up to ten kilometres from a year-round road were considered close to market towns and easily reachable by existing transport systems (see WaterSHED Cambodia's experience in Case study 1).
- Using maps, create initial buffer zones around the three key market infrastructure features.
 Where feasible, use publicly available GIS data files and software to do this, otherwise use paper or digital maps of the road network, provincial and district centres, smaller towns, and surrounding rural communities.
- Every rural community, in principle, can then be placed into a 'market proximity' segment based on its location:
 - The segment that is highly accessible and within the buffer zone (i.e. near to a rural market town, larger centre of commerce or main rural road)
 - The segment that is completely remote and inaccessible by road – requiring human or animal transport – from all three of these features
 - The segment in-between these two extremes

You will also want to consider regions with different sanitation contexts due to different hydro-geologic, topographic, and/or distinct cultural groups in terms of markedly different



sanitation practices, in the market research, if these represent important portions of the rural population without basic sanitation. Similarly, consider both CATS/CLTS triggered and non-triggered communities to understand and compare insights. These contextual differences can be captured through appropriate selection criteria for choosing representative regions for field study. Then within each representative region, select rural communities for field work according to their geographic market proximity segment.

When taking a national perspective to market research, a rule of thumb would be to conduct in-depth interviews with two to four individual households in one or two representative communities in each market proximity segment, across two to four representative regions of the country. Communities in the remote market segment, located in geographic areas far from all three basic market infrastructure features, are likely to be more challenging places to start MBS. While you should plan the fieldwork using these broad market proximity segments, the market research results themselves will provide the basis for defining actual sanitation market segments and selecting the target market for your MBS programme.

While conducting market research in a community, complement in-depth qualitative consumer research with a rapid assessment of existing household toilets, building practices, and preferences for toilet types, and speak with local authorities, community leaders and key informants to confirm findings. This will help you complement the core qualitative research with some rough quantitative estimates of relative demand for different toilet types. These rapid assessments should not be viewed or approached as large KAP or baseline surveys; they can be done very simply by local government staff. When planning your consumer research, remember it is better to have a smaller number of high-quality in-depth interviews than hundreds of short general surveys. Depending on the size and diversity of contexts selected for the market research, you may need to conduct 30 to 60 in-depth interviews across the range of households, market proximity segments, and regions to gain the insights you need (see the Haiti example in Box 2).

Estimating market size

In addition to critical insights from the in-depth consumer research, you will need to gain a broad understanding of the overall sanitation market size (i.e. numbers of households) and the size of potential sanitation market segments (i.e. different groups comprised of households with similar characteristics) across the rural landscape. First, consult available secondary data on existing toilet coverage and toilet types, as well as income, house type, rental status, water service level, and other socio-economic details on rural households in the programme target areas. This information can usually be found in recent national census reports and other general surveys and combined with population and sanitation coverage data and GIS mapping layers you assembled during assessment and planning. This helps build a broad understanding of the overall consumer market for sanitation. Do they primarily practice open defecation? Do most own an unimproved toilet? Is there a large proportion of shared facilities? What type of improved technology do most households have? Is water scarcity a major barrier to water-based technologies? What share of each income quintile have each type of improved toilet technology? Are there multiple families living in one compound or large proportions of renters? What is the rough estimate of total 'market need' in terms of numbers of rural households without an improved facility overall, and in each potential sanitation market segment in your initial geographic sub-area identified during the planning stage? Where support and funding for national-scale market research permits, a quantitative national/ regional household sanitation demand survey can be done to complement the in-depth qualitative consumer research with representative data from quantitative surveys – as was done by UNICEF in Sierra Leone (see Case study 4). Examples of household sanitation demand surveys for national scale market research from Cambodia can be found in Annex 2.

There are many good existing resources and tools to develop and conduct sanitation consumer research for MBS, as well as strong examples of sanitation market research from many countries (see <u>Box 3</u>).

Box 2: Segmenting and sampling the rural landscape for national market research in 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 in order to make programming recommendations for the World Bank funded Sustainable Rural and Small Towns Water and Sanitation Project, implemented by the Direction Nationale de l'Eau Potable et de l'Assainissement (DINEPA), the national water supply and sanitation company.

This box describes the sampling and segmentation methodology used by Aquaya to conduct the MBS market research in three departments pre-selected by DINEPA for their strategic importance for the Project. The research took place over a period of six months from inception to final presentation of recommendations to DINEPA.

Task 1: Broad geographic segmentation of the rural landscape

To prepare the sampling plan, publicly available national GIS data sets were collected first, showing administrative boundaries, roads, rivers, terrain, flooding, secondary cities, small towns, and other available features. These were linked to population census data at multiple administrative levels across rural Haiti's 10 departments and 145 communes. At this stage, the rural landscape was conceptually divided into three broad geographical segments based on physical market proximity: i) small towns; ii) peri-urban communities near secondary cities; and iii) 'dispersed rural', containing all other rural communities, with the caveat to refine this latter segment during field work.

Task 2: Cross-referencing with terrain type and other data to select communes in the three selected departments

Four terrain types expected to affect sanitation business feasibility and the cost of sanitation options in Haiti were identified: mountainous, high plateau (elevated, flat), low-lying non-floodable (flat), low-lying floodable (flat). Because nearly all construction-related goods are imported, DINEPA

was keen to understand how toilet costs and market function were impacted by distance from points of importation. They also wanted to understand possible market effects of CLTS and mason training programs. Geographic mapping and various information sources were used to characterize the 35 communes in the three selected departments according to terrain type, distance to nearest importation point, presence of CLTS and/or mason training, presence of cholera risk, and presence of a population/market centre. After excluding communes without a town of at least 5,000 people (i.e., no economic or sanitation construction market), nine communes (three per department) were selected to ensure inclusion of the largest city in each department, all four terrains, and areas with CLTS and mason training programmes.

Task 3: Selecting villages for in-depth research

In-depth scoping visits to each department were used to confirm the choice of communes and pick specific communities to begin in-depth interviews with households - the market actor at the end of the rural sanitation supply chain. Villages were selected to capture each of the three broad geographic market segments (see Task 1), however, within the 'dispersed rural' geographic market segment, communities beyond any kind of road and reachable only by foot or donkey, were excluded on the basis of information indicating no construction material supply chains reached these remote areas in Haiti. An overall aim was to ensure construction material supply chains could be traced from each selected community to its nearest rural market town, and up through any intermediary economic market centre/s to the relevant national importation point.

Task 4: Executing data collection

In total, 27 in-depth household interviews (mostly with latrine owners), as well as 7 focus group discussions to test emerging toilet product design and delivery model ideas, were conducted across 20 villages in nine communes. In parallel, 62 private sector interviews were conducted with local customer-facing toilet construction businesses, as

well as with national/regional businesses engaged in construction material supply chains.

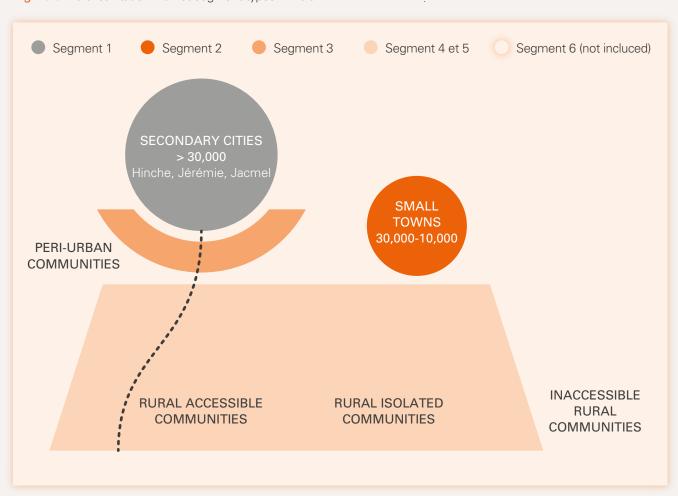
Following field work, the market segmentation model was refined to include one urban and five distinct rural sanitation market segments (see Figure 6 below):

- 1. Secondary cities (more than 30,000 people);
- 2. Rural small towns (between 3,000 and 10,000 people);
- **3.** Peri-urban communities within easy reach of secondary cities;
- **4.** Rural accessible (within 2 km of national/paved roads);
- **5.** Rural isolated (along secondary and tertiary non-paved roads); and
- **6.** Rural inaccessible (reachable only by foot or donkey).

The study recommended an MBS programme strategy to target segments 2, 3, 4 and 5 together. Across these four segments, the research found similar household product preferences and purchasing behaviour across genders and income levels, as well as favourable demand and supply market conditions. This indicates that the same sanitation products, business model design, demand activation approach and implementation strategy could initially be used across these segments.

For more information, please contact askwater@worldbank.org.

Figure 6: Rural sanitation market segment types in Haiti



Box 3: Resources for sanitation market research

- USAID's 'Hygiene Improvement Project'
 (HIP) published Sanitation Marketing for
 Managers: Guidance and Tools for Program
 Development in 2010, which has detailed
 instructions for preparing, planning and
 managing market research, and example
 interview and focus group guides and tools,
 analysis templates, probing techniques,
 sampling criteria and selection methods, and
 examples of outputs based on application in
 Benin, Ghana, Uganda and Tanzania.
- The online <u>'Sanitation Marketing Community</u> <u>of Practice'</u> has examples of MBS market research studies and reports that include study design, methods, results and annexes with interview guides and data collection tools from many countries. The examples below may be particularly useful
 - SNV's Bhutan sanitation market research (SMR) study, for supply chain research methods and tools;
 - IDE's Cambodia SMR demand study, for consumer household quantitative survey design, methods and tools:
 - IDE's Cambodia SMR supply study, for supply side research methods and tools;
 - UNICEF's Sierra Leone national SMR study (carried out by Nestbuilders International), for demand and supply qualitative and quantitative research methods and tools;
 - World Bank & UNICEF's Vietnam supply chain market research;
 - Willetts, et al.'s Vietnam and Indonesia remote area supply chain research;
 - World Bank & DINEPA's Haiti 'Aquaya Supply Chain' market research report and tools

- WSP's Introductory Guide to Sanitation
 Marketing and its online 'Sanitation
 Marketing Toolkit' has guidance on developing, procuring, and managing large-scale market research studies. This includes example terms of reference for market research firms, and example market research reports.
- IDEO's Field Guide to Human-Centered
 <u>Design</u> toolkit has methods and tips for conducting consumer market research, developing insights and generating design ideas.
- The 'Business Model Canvas' tool helps identify important topics for in-depth interviews with business owners, in order to understand and characterise their business model. Many online business model canvas tools and templates are available for download, such as this one.
- The <u>'BEAM Exchange'</u> in partnership with the Donor Committee for Enterprise
 Development – is a platform for knowledge exchange and learning about the role of markets in poverty reduction.
- USAID WashPalS MBS Enterprise Viability
 Toolkit (forthcoming) includes basic tools to
 collect data on the costs, revenue, income for
 the sanitation activities of a SME business and
 constructing a profit and loss statement.

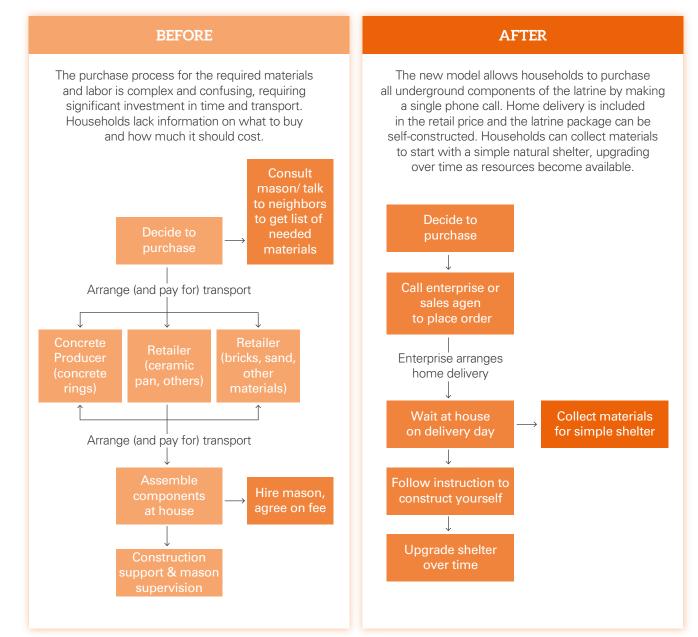
Understanding the consumer pathway to purchase

Often, it is difficult and complex for households to collect and arrange purchase and transport of the materials, components and services to build existing improved toilet designs. Rural households have to go to many different shops and negotiate prices for labour, materials and transport. Frequently they return to suppliers multiple times to purchase more materials to finish construction. In the end, each toilet may be custom-built with a unique final cost and total time to finish installation. If the

purchase process is confusing and time-consuming, and customers don't know what the final cost or duration of construction will be, this can be a major barrier to investment, especially for poorer households. Your market research will explore these issues in detail by mapping out the 'consumer pathway to purchase'. By understanding the steps, time and costs involved in each step of the current purchase and construction process, you can generate ideas about how to simplify it while also reducing costs and time. Figure 7 below outlines how the consumer pathway to purchase changed after an MBS intervention by WSP in Cambodia.

Figure 7: Understanding the consumer pathway to purchase

The consumer purchase process before and after an MBS intervention in Cambodia:



Case study 3

Partnering with local government for market research – UNICEF Malawi experience

Rather than contracting the work, UNICEF Malawi chose to manage market research themselves with help from an international consultant and a small budget. They engaged and trained local district environmental health officers (EHOs) in each of three start-up districts to carry out the research and undertake the data collection in their respective districts. Each EHO formed a local district research team of four staff, consisting of assistant EHOs, health data officers, and health surveillance officers.

A mix of research methods and triangulation were used, drawing significantly on the market research tools and guidance in USAID's Sanitation Marketing for Managers programme development manual and methods from IDEO's Human-Centered Design toolkit. They conducted qualitative research consisting of in-depth interviews with 35 households and 10 focus group discussions, as well as 14 interviews with suppliers and 10 with government representatives. They supplemented this by a quantitative survey of 222 randomly selected households to collect a snapshot of toilet building attitudes, knowledge and practices in five villages.

A core aim in developing the methodology was to support the Government to improve the entire sanitation sector. Thus, regular workshops to build understanding, discuss findings, and gain buy-in for the strategy were held, and short updates and top-line results were shared through a nationwide email list.

The research tools were piloted and tested in one district, then refined before rolling out to all three start-up districts. The findings were then shared and discussed at a national workshop with central and district government, NGO partners, private sector representatives and interested universities. The market research process took three months, from July to September 2011.

The research found that existing toilet options were very limited, consisting of either an unimproved or an improved design, capturing two extremes of durability and cost, with nothing in between. Poor durability and inherent risks of collapse of existing traditional 'do-it-yourself' unimproved pit toilets were key barriers to sustained ownership and use: nearly all households currently without a toilet had built one that subsequently collapsed. Dissatisfied with constantly rebuilding these traditional toilets, households wanted improved toilets for their durability, enhanced social status, greater privacy, the reduced effort required to repair/rebuild each year, and the ease of cleaning them. However, the perceived high cost of building the existing improved design was found to be a key barrier, because of the need for substantial cement - a scarce and expensive commodity in rural Malawi. Improved designs required significant savings for rural dwellers, 75% of whom lived below Malawi's poverty line at the time. No proven, profitable business model in the rural sanitation market was identified. Artisans currently provided pit digging, wood frame/floor construction, and masonry services. They were male, used word-ofmouth marketing, had no formal training in toilet construction, and did not provide building materials. High household awareness and expectation of hardware-subsidies for toilet construction was a major barrier to both consumer demand and local sanitation businesses. This perception and the continued use of hardware subsidies by NGOs would be a challenge for MBS. However, the research suggested valuable insights into how an MBS approach might move forward, such as:

- Developing a limited range of modular options for the subsurface and interface components (i.e. pit lining, flooring and slab) for durable improved toilet designs
- Aiming for a \$20 to \$35 price point range



- Using alternative materials and minimising cement inputs
- Engaging existing rural women business owners, currently not involved in sanitation supply, to test new innovative network business models for rural distribution of the new toilet designs
- Being prepared to counter ingrained conceptions of improving sanitation, especially with district government and village leaders who are accustomed to receiving hardware subsidies.

Full details of the research process, tools, findings, recommendations and next steps are available in several UNICEF Malawi market research report and a journal paper (see Resources and further reading at the end of this section). A major benefit of partnering with local government in Malawi was the creation of a key group of district level experts able to advocate for the MBS approach with peers and national government by sharing their skills and experience.

Case study 4 Commissioning a large-scale national study – UNICEF Sierra Leone experience

To better understand the sanitation market, UNICEF Sierra Leone commissioned a research firm to undertake a large-scale national demand and supply chain assessment, covering both rural and urban areas. The study used a mix of quantitative and qualitative methods to understand household consumers, supply chains, and existing products. On the demand side, it included a representative sample of 2,200 household surveys, 90 in-depth interviews and 20 focus group discussions in all 14 districts of Sierra Leone. On the supply side, a total of 114 sanitation service providers were interviewed and 40 retail stores were visited to collect product and pricing information. With a total budget of about US\$240,000 for the two studies, the firm completed the work in about 8 months in 2011.

The study found that about 50 per cent of rural Sierra Leoneans owned a toilet; mainly traditional pit toilets with no slab. While income and costs were found to be key barriers to toilet adoption, they were not the only ones. In rural areas, land type, a reluctance to build low-end toilets and a lack of attractive low-cost options in the sanitation market were all challenges. Social pressure, privacy, the avoidance of embarrassment and the wish for guests to have a facility to use were significant drivers motivating households to invest in improved toilets. On the supply side, the study found a very limited range of toilet products and a complete break in the rural supply chain for materials and toilet products. Lack of capital, inadequate training, poor access to materials and high transportation costs were key challenges for service providers and businesses. All supply chain actors relied on a passive sales approach. Poor collaboration and information flow between supply chain actors resulted in inefficiencies, lack of awareness of consumer preferences, and lack of ability to innovate, package, and set prices for products and services that address consumer needs.

Using insights from the market research, preliminary recommendations were developed for further demand and supply side strategy development. This included specific toilet facility design feature preferences and willingness to pay. Product design to improve desirability, affordability, storability and transportability of toilet products was the core recommended intervention. Other key recommended interventions included: a strong social marketing campaign using community and radio channels; links to microfinance and consumer credit to reduce up-front costs; business development services to service providers and small businesses; and the development of supply chain associations to increase co-ordination of key supply actors.

Immediately after the study, findings and recommendations were presented in a national stakeholder workshop of government and other partners. While the market research was not immediately used for designing an MBS programme, its high quality was recognised by stakeholders in 2013. The experience highlights the need for a clear plan to be in place to make use of the market research, and to begin advocacy work and next steps planning before the research is commissioned, so that momentum is not lost.

In 2013, the international NGO GOAL used the 2011 research to design Sierra Leone's first MBS pilot programme. Rather than commissioning another large-scale study, GOAL carried out small-scale validation research in their target area and were then able to move quickly to a product, business model, and communication strategy based on the 2011 market insights. Working closely with UNICEF, GOAL supported the Ministry of Health to put in place a 'National Sanitation Marketing Advisory Group', to guide them through the programme design steps. By November 2013, they had moved into pilot implementation.



Global insights into consumer behaviours

Market research on rural sanitation consumers around the world has shown that many of the motivations for purchasing an improved toilet relate to private non-health 'quality of life' benefits, including ones linked to positive, aspirational drivers. Common facility preferences are also linked to nonhealth features such as greater privacy, improved aesthetics, cleanliness and comfort, more value, and modernity. While constraints to investment often relate to affordability, they are also closely linked to the complexity of the purchase process, unpredictable costs, and a lack of suitable options that offer value for money. While your own local market research will be essential to understanding your target consumers in your own country context, Table 8 next page summarises some key insights from global research into consumer motivations, preferences and barriers to improving sanitation.

Conducting supplier and supply chain research

What is the sanitation 'supply chain'?

The sanitation supply chain is the network of businesses involved in the import, manufacture, production, distribution, and sale of sanitary ware components and toilet construction-related materials and services to the end customer. A supply chain has three key parts: raw materials, manufacturing and distribution (see Figure 8 below). Local businesses that sell sanitation-related products and services to customers often depend on the existence of many other local businesses to get final toilet systems built for the end customer. In most countries, sanitation products and services are delivered through housing or construction supply chains, so you will need to understand where sanitation fits within these supply chains.

Figure 8: Key elements and actors in sanitation supply chains

Supply chain element

Raw material	Manufacturing	Distribution		
How, when and from where do supplies and material inputs reach manufacturers?	How are these raw materials converted into finished products?	How do products reach end customers?		

Typical sanittation actors

Sand suppliers	Masons	Retailers	
Rock suppliers	Builders	Transport service providers	
Cement factories and suppliers	Gravel producers	Sales agents/promoters	
Importers/large scale distributors	Concrete producers	Masons	
Wholesalers	Brick makers	Contractors	
Equipment/tool producers	Plastics manufacturers	Microfinance institutions	

End customers

²⁶ These are updated findings from a synthesis of sanitation consumer market research from more than 12 developing countries in Africa, Asia and Latin America, compiled by Jenkins, M., and S. Sugden (2006). See Resources and further reading at the end of this section

Table 8: Global insights into consumer behaviours²⁶

MOTIVATIONS AND DRIVERS OF INVESTMENT

- Increased comfort and convenience
- Increased privacy
- Increased safety, for women, especially at night, and for children
- Pride and social status
- Increased cleanliness, in terms of personal hygiene, and domestic cleanliness
- · Reduced smell and flies
- Less embarrassment with visitors

- Reduced conflict with neighbours
- Good health in a broad cultural sense, often linked to disgust and avoidance of faeces, bad air, smells
- Reduced illness and accidents
- Increased property value, rental income
- Better access for those with reduced mobility from illness, disability or old age
- Passing on good habits and a better future to children (aspirational legacy)

PREFERENCES AND FEATURES OF DESIRED FACILITIES

- No smell (of urine or faeces)
- No sight of faeces
- Durable, long-lasting (does not require constant maintenance, repair)
- Easy to clean surfaces
- Solid and safe platform
- Safe for children
- Provides good privacy for women and girls for better menstrual hygiene management

- Attractive, good-looking, status symbol (aspirational)
- Modern
- Easy and comfortable to operate and use
- Water-based (cultures using water for anal cleansing)
- Dry system (places where water is scarce/ expensive)

BARRIERS TO INVESTMENT IN IMPROVED SANITATION

- Perception that a 'good' toilet is unaffordable, unattainable, 'too expensive'
- Difficulty accumulating cash for lump sum payment
- Not enough income (poverty)
- Complexity of purchase and construction process, multiple shops and labourers
- Technical complexity of construction
- Unreliable or no price information, no/poor knowledge of costs

- Locally available options offer poor consumer value
- Lack of awareness of available products, services or businesses
- Satisfaction with existing defecation practice/place
- · Low priority/competing priorities
- Distrust of businesses providing products and services
- Preference to wait for the 'ideal' toilet than to invest in an 'inferior' product

Source: Jenkins, M., and S. Sugden (2006).

What do you need to know? Three core research questions

- 1. What are the different types of businesses in or near target communities that provide goods and services for toilet construction directly to rural customers, or to adjacent industries that serve rural customers: what are their key characteristics, operations, customer bases, and needs; where are they located; and how are
- they connected to each other and to businesses further up their supply chains?
- 2. What are the current toilet designs, and component products and services available in local markets, and what do they cost customers to build?
- **3.** How can local customer-facing businesses be motivated to profitably deliver 'good' toilets to our target customers at a lower price for low-income households?

To answer these core questions, your market research should explore:

- Types of customer-facing businesses, locations of key markets/businesses and business networks
- For different types of businesses, their approximate size, product and service offerings (including non-sanitation offerings to understand their full business), assets, and existing customer base (including businesses and organisations/ institutions) and sanitation-related sales volumes
- Current approaches and strategies to business and financial management, human resources, cash flow, access to credit and financial challenges
- Current approaches to marketing, promotion and sales, and geographic reach
- Available toilet components and material inputs, including prices (and cost drivers), upstream suppliers, margins and sales volumes, including potential for innovation
- Business relationships between inputs suppliers, manufacturers, transport service providers and retailers
- Degree of competition and/or collaboration among similar types of businesses nationally, regionally and in local markets
- Construction and related maintenance services, including pit/tank emptying and disposal, and skills capacities
- Estimated scale of market activity, including number and geographic reach of market players in local markets of each sub-region, and distribution channels from national to provincial, and down to local level

Supply chain research involves understanding costs, prices and margins at each step of the supply chain down to the end-customer, including for transport services. Calculations need to be made to work out the total customer cost of toilet construction, including materials, services and transport (see Figure 10 and Table 9). This must be compiled based on actual customer-reported quantities used, purchase locations, number of trips, and transport modes, etc., for building and installing each improved toilet design encountered in self-financed owner households, combined with current retail and service prices collected in the field, in different geographic market proximity locations and regions.

Gathering supply chain insights

Supply chain research typically uses in-depth, qualitative interviews and discussions with different types of businesses and 'product scans' to answer supply research questions. It is best if supply research is done in conjunction with household consumer research, since this will help you start to understand the critical linkages between customers and businesses (see Figure 7). At this stage, you want to understand how a business's sanitation-related sales fit into their broader business portfolio, so it is good to probe beyond just sanitation.

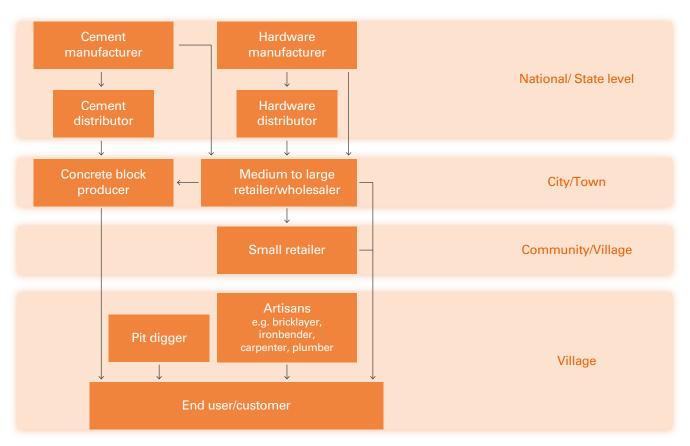
In supply chain research, it is common to use a sampling technique known as 'snow-balling', whereby the research team identifies the next businesses to consult with by asking for referrals from other supply chain actors as they interview them. For example, your research team might begin in a rural village and ask households for the business/es where they usually purchase their building materials. You can then go to those identified businesses and ask them where they get their supplies, and so on. Similarly, you should also talk to the major national-level manufacturers and suppliers of sanitary components and construction materials and ask where and to whom they distribute and sell their supplies across the country, and how these are transported. By moving up and down the chain, you can build a map of the suppliers, distributors, producers, and service providers, including business names, numbers, and locations, who are active in sanitation and related construction – and you can assess how well they link together.

By talking to different businesses, you can develop a 'supply chain map' – a qualitative picture of how the market system works (see Figure 9) – as well as a working understanding of costs. For example, you might speak to a pour-flush pan importer in the capital city, a pan distributor in a district market centre and a pan retailer in a smaller town. In this way, you can start to understand the costs, prices and profit margins for a particular input (e.g. a bag of cement) or service (e.g. truck transport) at each step or link in the supply chain. This helps to identify where the bottlenecks and barriers in the supply chain are, and how to address them.

As with your consumer research, a smaller number



Figure 9: Example of a supply chain map from Nigeria



of high-quality in-depth interviews is better than a high number of superficial ones. In supply research, you will need to 'follow the supply' of necessary inputs, which will often mean venturing beyond your target area and national borders, to understand costs associated with importing key materials and inputs. Depending on the nature of supply chains in your country, you may need to conduct 30 to 40 in-depth interviews across the range of business types to gain the insights you need. The central focus should be on local customer-facing sanitation businesses in rural markets, including transporters, the wholesale distributors who supply them, and manufacturers or importers of key input materials higher up the chain. Examples of supplier and supply chain research can be found in Annex 3.

Assessing existing business models

Besides understanding how sanitation businesses networks are functioning, your supply research will help you to analyse existing business models. In most cases, sanitation is just one part of an owner's broader business. With the help of the 'Business Model Canvas' tool,27 you can map the sanitation and non-sanitation activities of an existing business to understand how they operate and what problems they face in expanding their sanitation business activities. Are businesses making enough profit to sustain their operations? If so, how? And if not, why not? For example, can they access the moulds they need at an affordable price? Are material suppliers making it easy and affordable for customers to buy and transport the right amount of materials and labour they need to install the final product? These details help you determine which local businesses have the best fit characteristics to be the focal point toilet business for MBS development, how their existing business models could be improved, and will help you work out the best way for your new toilet product system package to be introduced to serve your target markets (see 3.4 Demand activation). Assessing available product and service

²⁷ See Annex 4: 'Business Model Canvas' tool in the accompanying MBS Guidance: Annexes document, and in 3.3 Delivery approach & business model design.

offerings

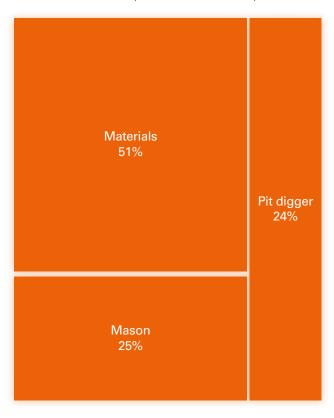
An important component of market research is to understand what toilet designs, components and construction materials and services are already available on the market locally or regionally, and what they cost. Combining conversations with customers to 'reverse engineer' the design, construction and total cost of their toilets (e.g. material quantities used, businesses they purchased from, transport methods and distance, and skilled and unskilled labour inputs), and conversations with supply chain businesses, you can build a database of what is already available and costs, including samples and pictures of components. Your initial product scan should answer questions such as:

- What toilet systems are available? What are their features? Are they available everywhere, or are they hard to find?
- Are rural households aware of these toilet systems? Do they have them installed? What are their experiences? How have they adapted or altered the toilet systems?
- How easy is it for a rural household to purchase the required components and materials and have them installed? What and whose expertise is required for installation?
- What toilet systems are currently being marketed? What sales techniques are being employed? What are the sales rates?
- What are retail prices of key inputs and materials needed for households to build each toilet system? How variable and predictable are they? What is the total cost to install toilet designs in different market locations (broken down by materials, transport and installation)?

In your product scan, it is often useful to break down products and services by sub-surface pit, slab or interface, and shelter solutions for onsite sanitation. By understanding these different elements, you will begin to see if any of the available toilet systems have potential to be part of your MBS programme. You can begin to assess ways that existing designs people prefer can be improved to lower costs, increase quality, enhance customer value, or make purchase and installation easy, for example, through product

Figure 10: Cost drivers of building improved toilets in rural Haiti

Average breakdown of the costs to construction current improved latrines in Haiti (2017 Prices, US \$240 average total cost, excludes superstructure and transport)



Source: Aquaya (2017).

design modifications, production changes such as standardisation and/or pre-fabrication of components, re-packaging, new business models for delivery, and/or sales marketing and promotion. All of this lays the groundwork for your product system design as well as your interlinked business model design and demand activation strategy.

Global insights into sanitation supply chains

Market research on rural sanitation supply chains from around the world has highlighted some common characteristics and barriers of undeveloped sanitation markets and rural sanitation businesses (see <u>Table 9</u>). As with your consumerside market research, your own local research will be essential to understanding the supply side for sanitation in your country context.

Table 9: Global supply-side findings and insights from rural sanitation market research

Common characteristics of undeveloped sanitation markets and rural businesses prior to MBS interventions

1.Toilet product system and costs

- Custom built on-site, usually by mason.
- Pit, sub-structure, interface dimensions and designs vary greatly; non-standard dimensions increase material costs and wastage.
- Customer responsible for purchasing and transporting all materials, components, and services individually by themselves.
- Non-standard informal construction techniques, often resulting in haphazard quality/ over-building, further increasing mason labour and material costs and increasing unpredictability. Labour often makes up 50 per cent of total costs (see Figure 10).
- Concrete slabs custom cast in-situ (poured in-place, over pit or hole) rather than
 pre-casting slabs on-site using re-usable standard forms. This increases costs, waste
 materials and labour.
- Unpredictable final costs mean most rural customers construct their toilet over repeated cycles of saving, purchasing materials, and building until funds/materials run out, sometimes taking 2-3 years, and may never complete their superstructure.

2. Local businesses involved in toilet construction

Given how improved toilets are sold and constructed (see above), customers depend on the local presence of these businesses:

- Masons
- Pit diggers
- Construction material suppliers (heavy/bulky: cement, rebar, wood boards, corrugated sheets)
- Hardware stores (sanitary wares, nails, pipes, hinges; may or may not offer some construction materials)
- Pre-cast concrete/cement product manufacturers (cement block, cement rings, slabs)
- Gravel seller (quarry owner, rock collector, self-collect)
- Sand seller (quarry owner, sand collector, self-collect)
- Transporters (big truck, small truck, tuk-tuk, moto owners)

3. Typical characteristics of businesses in the rural construction and sanitation market

- Micro-, small- or medium-sized enterprises.
- Typically do not keep detailed records of accounts and transactions. Often have low business skills, need support to realise how they might create more value.
- May operate informally, below the radar, lack licensing or ability to pay taxes.
- Masons may have little formal training or exposure to quality toilet building.
- Single proprietor (as in pit diggers/masons) or family businesses in which owner's spouse, children, or relatives may assist.
- Business acumen increases with assets (e.g. buildings, yards, vehicles, equipment, inventory) owned and managed, employees, years of experience.
- Sanitation is often not the primary business line. Customers who purchase toilet -related construction goods/services almost always represent small, irregular portion of sales, revenue and income.
- To mitigate intrinsic seasonality and variability in rural construction demand, they have multiple lines of business, sometimes including non-construction.

²⁸ These include: generic construction materials (e.g. cement, gravel, sand, rebar, cement block, brick, pipe, wood, corrugated sheet, nails, etc.); pre-fabricated toilet construction components (e.g. pre-cast concrete rings for pit lining, connector box, slab floor); specialised sanitary ware (e.g. ceramic, cement or plastic squat pan or platform, toilet seat, flush toilet bowl and cistern, tiles); and services from pit diggers, masons and transporters.

4. Current customer segments (target market)

- Small- and medium-sized enterprises (SMEs) in rural construction/toilet market may target a variety of customer segments within their geographical market-reach, including:
 - NGOs
 - Public sector: regional or local government, institutions (schools, clinics)
 - Contractors, working for commercial customers or wealthy households
 - Smaller retail businesses located in more remote market centres
 - Masons
 - Individual households (DIY builders)
- Two factors can indicate that a business is potentially a good fit to be an MBS focal point business:
 - Individual households are an important customer segment now, or in future growth plans
 - Business is already reaching communities in the geographic market segment/s of interest for starting MBS

5. Current sales and marketing tactics

- Typically wait for customers to find them at their premises.
- Depend almost exclusively on word of mouth to market their products and services.
- Rely on repeat customers to maintain income, and satisfied customer referrals for new customers.
- Strategies used to retain customers and attract new ones through referrals:
 - Offering good customer service and competitive prices
 - Maintaining a reputation for good quality
 - Offering flexible payment options, including informal credit and instalments to reliable & repeat customers
- To distinguish themselves from their competition, and retain customer share, some
 offer extra services, such as arranging delivery, providing reliable technical and
 product information, or offering credit.

6. Delivery approach for toilet products

- Little or no co-ordination among the many rural business needed to build a toilet, resulting in a highly fragmented and complex market place for customers to understand, navigate and master on their own.
- A typical customer visits as many as 5-7 different businesses in different locations, and may need to travel to each of them in person to negotiate.
- Customers must arrange with and pay transporters to get materials from each location back home.
- Customers often return to purchase more construction materials from a supplier mid-construction, because the initial material quantity list from the mason was approximate, they did not know the full amount needed and/or did not save enough to purchase and transport all inputs when they began.

7. Profit margins

Margins (the mark-up on costs that an SME charges for toilet-related goods and services) vary with the type of goods/service, amount purchased, and other factors, including local demand:

- Generic construction materials (e.g. cement, wood boards, rebar) usually have very low margins, because volumes are high (stock turnover is high) and/or there is competition. Transport costs in the supply chain are often the main factor affecting the final retail price in a given local market.
- Specialised toilet components, such as ceramic pans, other sanitary wares, special
 pipe sizes, or pre-cast concrete rings for pit linings, typically have higher margins
 because these goods have low turnover/low demand, and consume a greater share
 of scarce and valuable business resources (storage space, working capital). If fragile
 (e.g. ceramic), margins must also cover losses due to breakage.
- Masons rarely have set prices for a job in order to negotiate the highest price
 they can extract from each customer. They also consider the income they can get
 from other jobs, as well as the number of visits and complexity to complete a job.
 While masons have low input costs, these may be higher for small jobs like toilet
 construction. Inputs include travel time and costs to/from a customer's home and
 tool investments. When jobs take longer, they may demand more.

8. Sources of business finance

- SME owners need seed capital to start, operate and grow a business. Personal savings and savings borrowed from relatives are often the main sources of seed capital for rural businesses.
- Rural SMEs usually depend on supplier credit to maintain their inventory of goods, offer new products, and grow sales. Supplier credit can dry up, for example, where construction goods are imported and currency fluctuations are common, or when distrust exists or develops between supply chain actors.
- Access to and preference for small business loans from microfinance institutions (MFIs) or banks varies greatly, depending on context, local availability, loan requirements and interest rates, and capacity and formality of the business, among other factors.

Market barriers for customers in undeveloped rural sanitation markets

1. Why rural households with demand hesitate to buy an improved toilet

Market research across countries consistently finds high rates of household dissatisfaction with their defecation place and high rates of desire for a good toilet among both poor and non-poor rural households without basic sanitation, yet both poor and non-poor households hesitate to invest in building improved facilities.

- A major reason found in nearly all studies is that rural enterprises engaged in sanitation are not currently offering households the products and services they want to buy.
- The major market barrier for poor rural households is liquidity, or cash flow, rather than inability to pay, even among the extreme poor. Many rural households have uncertain and seasonally variable cash incomes, and face competing priorities for this cash. For poor households, it can be nearly impossible for them to save up the lump sum for building a toilet, especially when the total amount required to complete construction is unknown, and varies from household to household.

2. What rural households (both poor and non-poor) want in a product system in order to buy it

- Poor households want good quality products that are simple to maintain, accessible service/suppliers, credibility and choice, and a complete service.
- They admire and aspire to have the same kinds of facilities that their wealthier, early adopter neighbours have and use.
- Customers care about the product package and the provider. When deciding to buy
 or not, they care most about price, reputation, assurance of after-sales services,
 easy transport, and a limited variety of package options/add-ons.
- Reputation of and trust in the provider and their offering is as important as the toilet product package itself.
- An instalment payment option is one of the most frequently cited desired service options poor households want from their sanitation provider, beyond the right product system.

3. Impacts of the fragmented supply chain and delivery approach

- A highly fragmented supply chain and lack of co-ordination among businesses on toilet design and materials means that customers must make complex and costly construction purchase decisions on their own.
- Customers rely on local masons, neighbours and relatives for information on how to build desired toilet models and estimate what it might cost them. The information from these sources is incomplete, uncertain, and conflicting.
- Customers who succeed to build often have some construction expertise in their family to rely on and can afford to take risks.
- For poor households the complex, uncertain process entails significant risk, in terms of unknown time, effort, and total cost, without guarantee of success at the end.
- Customers with an improved toilet almost never know the total amount they spent
 on all the materials, labour, and transport to complete construction. Researchers
 much break down and collect from the customer the quantities of each material,
 component, and labour used in each part of their facility. They must also identify
 specific businesses where materials were purchased, prices paid, and the mode and
 cost of transport. Only by collecting these details can the customer's true total cost
 of their improved toilet be estimated.

Sources: Comprises findings from WSP-IFC (2013), Monitor Deloitte (2013), Aquaya (2017), SNV Bhutan (2014), SNV Bhutan (2012), Nestbuilders (2011), Roberts, M. & A. Long (2007), Slater (2008), Willetts (2017), Dumpert, J. & E. Perez (2015) and other unpublished studies. See Resources and further reading at the end of the section for more details.

Conducting research on the business environment

The business environment is shaped by government policy, as well as the availability of raw materials and financial services. Depending on complexity and resources available, you may prioritise actions to address core barriers in the business environment.

What do you need to know? Research questions may include:

- What policy frameworks are in place, how effective are they, and to what extent do these policies contribute to ensuring product systems reach the poorest?
- What regulations/standards are in place and are they effective in ensuring the quality of the products on the market? Are regulations/ standards facilitating or constraining competition, entry of new products into the market, or affordability?
- What are the functions, motivations, barriers and influences of key institutions in establishing a conducive business environment?
- What financing sources and structures are in place for suppliers and for households, and are they affordable?

- What public-private partnerships (PPPs) exist at the local/national level for sanitation, and are they effective?
- What taxation and tariff structures are in place, and how do these influence the availability and affordability of sanitation commodities and services?

To conduct research on the business environment, you may wish to start with a desk review of relevant policies and reports that capture the challenges and enabling factors that face enterprises in your context. Next, you will use in-depth, qualitative interviews as in previous components of your market research. Your key informants might include government officials from agencies that have a role in regulating or encouraging business development (such as bureaus of standards or SME development agencies), business associations (such as chambers of commerce or associations of sanitation workers), and owners of businesses of different sizes and types.

Planning and managing your market research

Close management of the market research process – typically by WASH and supply specialists working in partnership – is essential to ensure

that you get the information you want, which will allow you to proceed with strategic decisions and preparations for the next steps in designing your MBS intervention. Here are some tips for planning and managing the process:

1. Create the terms of reference (TOR)

Developing a good TOR requires clarity about how the research will be used. It is good practice to conduct consumer and supply chain research together in the same research study, for efficiency and consistency.

If a good-quality market research study has recently been done in your country, it is often not necessary to repeat the effort. Instead, you can engage in a much smaller-scale effort to validate the findings in your target area, fill gaps or answer any remaining questions (see the Sierra Leone example, Casestudy 4). During TOR preparation, check with other stakeholders and review any previous work to determine the required scope of new market research. If you decide that additional market research is needed, be sure to include previous studies and reports as references in the TOR.

To prepare your TOR:

- Define the research purpose and scope, the questions you want to answer, and the objectives and outputs you would like to see.
- Reflect on how you will use the results and information you collect to inform your product system and focal point business model design, demand activation strategies, and actions to improve the business environment.
- Determine how you want the data to be analysed and presented. A useful framework for analysing sanitation consumer behaviour is the 'Sanitation Preference, Intention, Choice Decision Stages Model'.²⁹ This framework can be included as an annex to the TOR, for bidders to consider as they develop their proposals.

Consult example market research TORs (see *Annex 5*) and market research reports for ideas and inspiration (see <u>Box 3</u>).

It is possible to combine market research TOR within wider programme design TOR, working with an implementing partner. In Nepal, UNICEF commissioned small-scale consumer and supply chain 'deep dive' research as part of a broader product design process. In Ghana, UNICEF packaged in-depth research as the first stage of business model and product development. Depending on your resources and timeframes, combining market research with subsequent programme design activities may save time and ensure consistency and momentum. At a minimum, there should be a good overlap of team members and access to the market research data and results during the subsequent programme design activities.

2. Scope the effort

Establish a budget envelope and get a sense of the usual rates for market research firms and consultants for similar projects. You can consider using a specialist firm (as in Haiti in Box 2 and Sierra Leone in Case study 4) or one or two consultants (as in Malawi in Case study 3). Research costs will vary depending on which approach you use, the geographic areas to be covered, the data collection and analysis methods, sample sizes, and ease/ difficulty of reaching target areas. Depending on the scale and scope of the effort, market research can take four to six months.

3. Recruit a qualified team

Consider recruiting a professional market research or business development services firm, or one or more qualified consultants. Make sure the proposed team has demonstrated experience in qualitative research methods and quantitative data analysis, ideally also GIS skills. Strong qualitative research skills and a strong understanding of local market contexts are more important than knowledge or expertise in sanitation, public health, or engineering. Firms specialising in rural market or value chain development (for example, in agriculture) are often well-placed to conduct this type of research.

The team should include local people who can communicate fluently in the required local languages. Check the experiences and backgrounds of the proposed team, but more importantly check their past work. To build capacity of your own team or local partners, consider including one or more of them in the research process.

4. Provide support and input

Once the consultant or firm is ready to start, meet to clarify the proposed research plan, timeline and deliverables. In developing the research protocols, encourage the research team to consult and build on existing questions guides, sampling guidance, and other tools (see **Box 3**: Resources for sanitation market research). For large contracted studies, the firm should prepare an inception report, covering the detailed field methods, draft instruments, pretesting plan, sampling methods, analysis plan, and timetable. For smaller qualitative studies, UNICEF should review the interview and discussion guides, study sites and sample selection, and data analysis approach before fieldwork begins. As the research gets underway, stay informed of progress and challenges, and request regular updates from the field team.

5. Analyse and share the results

The final research study report should include top-line results, a description of methods, and presentation of the full findings and results. The initial draft may go through several revisions based on your team's feedback and review. Depending on the type of research you are conducting, you may want to ask for translated transcripts or summaries of individual interviews and focus group discussions, or clean copies of primary data sets including the lists and contact details of interviewed businesses. The final research results and analysis are a key input into the other activities in your MBS programme design, so make sure you receive these on time. It is always possible to go back later to conduct further analysis if required. When the results are ready, the research team should present and share them in a workshop with key

government partners and other stakeholders, so that you can discuss and analyse findings together and brainstorm directions for the next steps of your programme design. USAID's Sanitation Marketing for Managers programme development manual³⁰ includes guidance and tools for organising a stakeholder workshop to present and discuss the sanitation market research results. You may want to consider organising one or more separate events with private sector industry partners, including importers, manufacturers and distributors of key toilet construction components, to review and validate the results, and engage them to discuss ideas for developing rural sanitation markets to support government mandates (for more on carrying out industry consultations, see Annex 6).

6. Use market research to effect change in the market

Market research is not just a tool for designing your MBS strategies. Once your programme is up and running, you can use the same methods and approaches to understand how consumers and businesses are responding to your market facilitation interventions. You can use in-depth interviews and surveys to understand customer satisfaction with new products and services or continued barriers among those who have not invested. You can use the 'Business Model Canvas' tool and WASHPaLs' 'Enterprise Viability Toolkit'31 to understand the operations and profitability of businesses offering the new product system package and associated services. Local product scans can be performed to determine changes in local market prices. In a market-based approach, market research is used continually, to track market trends and evolve programme strategies.3.1 Market research

³⁰ USAID (2010). See Resources and further reading at the end of this section.

³¹ See Resources and further reading at the end of this section for details of these tools.

Resources and further reading

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Examples of sanitation market research studies and reports:

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Vietnam

London School of Hygiene and Tropical Medicine (2015). Sanitation and Hygiene in the Northern Mountains and Central Highlands of Vietnam.

Websites

'Business Model Canvas' tool.

At: www.businessmodelgeneration.com/canvas

'Business Model Canvas' (App).

At: www.businessmodelgeneration.com/toolbox

'Human-Centered Design Toolkit'. At: http://designkit.org

'Sanitation Marketing Community of Practice' (resources for sanitation market research studies and related tools and materials). At: http://www.sanitationmarketing.org/resources

USAID: 'WASHPaLS Enterprise Viability Toolkit'. [forthcoming]

WSP: 'Sanitation Marketing Toolkit'. At: https://www.wsp.org/sites/wsp/files/Sanitation%20Marketing%20Toolkits/toolkit/toolkit-home.html

See also WSP Sanitation Marketing Toolkit website to download supply chain studies from Cambodia, India, Indonesia and Tanzania at: http://www.wsp.org/toolkit/conducting-formative-research

Videos

Alex Osterwalder. *Business Models Beyond Profit*. Available at: http://slidesha.re/15BMIJ

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3.2 Product system design

Quick reference

Iterative process of user testing and product prototyping with target customers and businesses to develop product concepts Industrial design and engineering to refine product concepts and production/ construction processes Deeper insights into potential delivery approaches to simplify the consumer What does it involve? pathway to purchase Deeper insights into potential focal point businesses and business models for delivering the new product system(s) Deeper insights into how to activate customer purchase decisions for the new product system(s) At least one affordable, desirable core product system option (possibly with extensions/add-ons) for the target market that is viable and marketable for local What are we trying businesses to offer to achieve? • Define the product system offering(s) that will drive the development of business models and demand activation strategies How long will it take? 3-4 months Qualitative research and product design skills • Industrial design/engineering skills Initial insights from market research on ways to reduce costs, improve quality, increase desirability, and simplify purchase and delivery of the target market's What skills desired toilet and resources In-depth understanding from market research of businesses in the local are required? construction market and how they operate • Clear design brief based on market research findings and defined target market • Strong methodology, fieldwork plan and user testing guides Adequate work space and budget for materials, labour and tools to prototype • Ensure the needs and perspectives of customers from different socio-economic strata, including the two lowest wealth quintiles, are included in the iterative design and testing of product systems for the MBS programme **UNICEF** equity and • Ensure the needs and preferences of women and girls, along with those of men gender reminders and boys, are equally explored, understood and addressed in product system design and testing, by including women customers and design team members, as well as men, in the iterative design and testing of product systems for the MBS programme

Overview

With good market research and the target market segment(s) identified, you will know whether there are already product systems available that meet the needs of your target market segments at an affordable price. Where there are no product systems that meet their needs readily available, or where designs need to be further optimised, this should be a starting place for your MBS programme. Without focusing on this critical aspect, you may waste effort in considering other parts of the market system when the products fundamentally do not meet the needs of your customers or are simply unaffordable.

Typically, product system design in the rural MBS context is in fact 're-design' or 're-packaging' of materials or configurations for an existing toilet system that most people already want, rather than introducing radically new options (for example, advanced treatment technologies), which require much longer lead times and sophisticated research and development skills. While in many cases, a new component or production step may be re-designed or introduced (for example, commercial plastic pans in Nigeria, re-engineered toilet rings in Indonesia, an innovative new pre-cast concrete component in Cambodia, or pre-fabricated doors in Bihar), these will need to be designed and configured within a full integrated product system package.

Product design is not just about technology features. You will need to apply a design approach that addresses the user's entire experience with the product system – including where and how it is purchased, packaged, transported, installed, used and maintained. In designing the 'right' product systems, you will need to think about people, technologies and businesses. Toilets must be delivered profitably by local businesses and must be easy for local demand activators to 'sell' to target customers within your MBS programme area. The 'Human-Centered Design Toolkit'³² can be used to develop the 'right' toilet designs that your target low-income households will want, purchase and use.

A key function of the market is to offer target customers options that match their preferences and budgets. However, many MBS programmes fail to invest sufficiently in product design.³³ This step is often the least familiar and most misunderstood by WASH and development stakeholders.

It is often assumed that products already available are good enough, or that existing technology offerings are sufficient for 'informed choice' to households. Some programmes skip directly to designing delivery systems, business models and market activation approaches without carefully considering the product system offering. But without clarity on product systems, it is impossible to make good decisions about how to deliver or sell them. And without addressing real issues related to cost and construction, it may be impossible to penetrate the low-income customer market.

The purpose of product system design

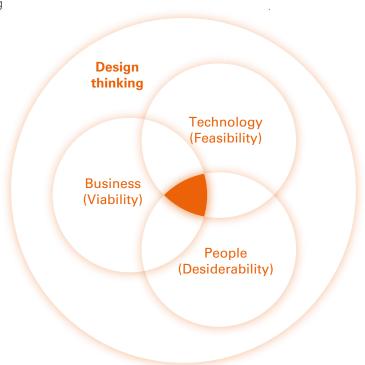
In MBS, product system design (or, more typically, re-design) aims to:

- Reduce customer cost: Good design should ensure more equitable access for low-income target customers by focusing on reducing costs of an improved toilet (see Table 9).
- 2. Improve customer value: Equally important, product system design aims to improve customer value. This means ensuring that toilet systems are both affordable and desirable to targeted low-income customers. Focusing on value does not mean designing a product system at the very lowest cost. Usually, the cheapest possible solutions offer very poor value, are not desirable to customers, and are not something they are willing to invest in. Your design work will consider trade-offs between cost and desirability to arrive at the best-value solutions for your target customers.

³² See Resources and further reading at the end of this section

³³ USAID (2018). See Resources and further reading section at the end of this section

Figure 11: Design thinking



Box 4: What is a toilet 'product system'?

In this guide, the term product system refers to a toilet facility used for capture and containment of human urine, faeces and menstrual blood, comprised of three core elements:

- 1. The substructure (e.g. pit, septic tank)
- **2.** The user interface (e.g. slab, pan, platform, water closet), and
- 3. The superstructure (e.g. walls, roof, door).

Product systems are different combinations of toilet construction materials, pre-fabricated toilet components (e.g. sanitary ware, concrete rings, platform slabs) and construction services (e.g. pit digging, building, assembly) and the specific way they are packaged together and installed into a usable facility. MBS product design typically focuses on packaging integrated product system(s) for the substructure and interface, and not just on a single component (e.g. a toilet pan).

Operation, maintenance and hygienic safety are also fundamental aspects of a product system,

including what happens when containment systems become full. WHO's 2018 *Guidelines on Sanitation and Health*³⁴ provides detailed technical guidance on safety considerations, and contains 'Sanitation System Fact Sheets' with specific technical performance, design and operating considerations for the most common on-site sanitation technology systems in rural and urban areas.

What is an 'upgradeable toilet'?

An upgradeable toilet is a toilet product system that allows the customer to add to existing components or replace them with superior or higher quality materials for increasing utility, convenience, or appeal in a way that caters to a wide range of income groups via flexibility for customisation (e.g. addition of tiles to a cement slab or replacement of a thatch roof with a tin roof). Subsequent investments build upon the initial one so that, in principle, very little or none of the customers' money or effort is 'wasted'.

3. Simplify purchase and installation: As the product systems are defined, you should start to consider business models that would improve customer value, as well as delivery systems that would reduce the difficulties, complexity, and effort of buying, transporting, and installing them. These will be further developed, tested and refined during delivery approach and business model design as explained in the next section.

Design thinking uses insights about people's desires, potential technologies and business needs to develop new ideas and create new products and services. Design thinking asks three key questions (see Figure 11 previous page):

- 1. What do people want and need? (Desirability)
- **2.** What is technically possible to produce and sell? (Feasibility)
- **3.** What is financially possible for local businesses? (Viability)

Engaging in the design process

A simple three-phase design process can help you think about these three key questions. The design process moves from 'inspiration to ideation to implementation' (see Figure 12 below). Note that the term 'implementation' in this context refers to the design process step, and not to full MBS programme implementation. The process does not just happen in a straight line, but rather goes through repeated cycles and shortcuts to explore and develop ideas; designers jump between

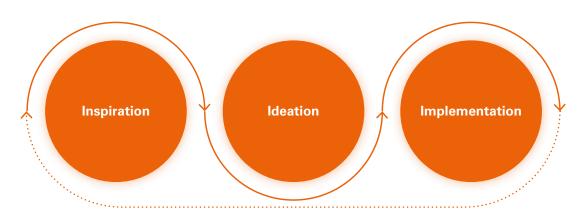
stages to test ideas and develop concepts. The design process is typically driven by a design team (described below). The design team should bring in relevant stakeholders at all stages of the process to inform and complement its own abilities; in design thinking, good ideas can come from and be inspired by anyone, not just 'technical experts'.

'Inspiration'

The 'inspiration' phase, where you gather the relevant insights about customers and businesses, began during your market research with in-depth, qualitative interviews and discussions with relevant actors (typically household decision-makers, masons, concrete producers, retailers, manufacturers, NGOs, government sanitation workers and others). By requiring insights and ideas for product system designs/re-designs as a core output of market research, you will be in a better position for inspiration. Preferably, at least one key member of the market research team should also be part of your design team. At a minimum, they should participate in the inspiration stage.

Your design team will likely need to do some rapid field validation of the consumer and product insights and ideas from your market research. The team will want to interact with potential customers and businesses for themselves, in addition to reviewing the reports and key findings from the market research. Take caution not to skip right to design before doing the qualitative and quantitative market research to understand and select your target market (who you are designing for) and fully

Figure 12: Three-phase design process



understand the range and operations of existing local businesses in your market research. Rapid qualitative insights to inform product design do not replace the need for broader market research to determine your market segments and understand other enabling market conditions. See *Annex* 7 for example question guides for focus group discussions to gather product insights.³⁵

The goal of the inspiration phase in the design process is to trigger new ideas. Often a single conversation or market research finding can lead to a great idea. At this stage, it is very useful to go back and talk with people who are doing something exceptional to learn what makes them different from others and to understand how to apply their thinking and actions to create new sanitation solutions. We call these people 'positive deviants'. For example, in Cambodia, building on strong national market research studies, the design team conducted rapid field research, seeking out a villager who had made a homemade pour-flush toilet out of a cut and deformed PVC pipe. Talking to him helped the team develop a key insight about consumers' lack of understanding of toilet plumbing, which greatly informed later designs.

'Ideation'

During the 'ideation' phase, the focus is on generating and developing ideas. Early on, brainstorms and sketch sessions can be a good way to get many ideas onto paper quickly. Once the design team has a lot of ideas, you can select which ones might be the best to develop into rough prototypes to get feedback from users. Prototypes should be viewed as tools for prompting conversations and answering questions. There are many creative ways to generate design ideas in an ideation session. The Bill & Melinda Gates Foundation's User-Centered Design (UCD) in Sanitation microsite³⁶ includes a comprehensive list of relevant tools and experiences to give you inspiration (see Box 5 next page). Experienced designers will be familiar with these types of tools and how to use them.

When sharing prototypes with customers and other stakeholders, you want to find out what they think. What do they like? What needs to change? The learning you get from testing basic prototypes is used to inspire and inform better ideas and more refined prototypes in an iterative process. Ideation sessions are best with a small group of diverse thinkers from a mix of disciplines. They should be kept short (one to two hours for brainstorming and sketching; one to four hours for rough prototyping) and have a specific goal (e.g. brainstorm 100 ideas or build five rough prototypes) focused on a specific topic (such as 'how to reduce costs of concrete rings' or 'how to install a plastic pan securely').

During ideation, you can work directly with customers and local businesses as designers. For example, in Malawi, the design team facilitated a series of three-day design workshops with local masons, environmental health officers and community members to generate prototypes and ideas (see Box 10).

'Implementation'

During the design 'implementation' phase, you will turn ideas and prototypes into reality. This phase involves beginning to work with local businesses and with the supply chain to understand how the product systems and their components might actually be made, and what they might actually cost to build. You will need to involve relevant businesses early to ensure that you do not design something that cannot be made, or would be too difficult or expensive to distribute and install. Design implementation typically involves refining the product concepts through industrial design and engineering to turn them into viable, marketable product system offerings. This includes integrating the product systems into existing manufacturing or construction processes, and identifying and refining any required equipment, processes, or techniques.

Depending on whether you are modifying existing product system designs and configurations, redesigning product components, or introducing

³⁵ You can also find guidance on FGDs in USAID's 2010 Sanitation Marketing for Managers, and in Aquaya's 2017 market research study in Haiti (see Resources and further reading at the end of this section).

³⁶ See Resources and further reading at the end of this section

Box 5: Prototyping

What is a prototype?

A prototype can be anything that represents an idea – physical models, photos, a hand drawing, a rendering, a cartoon storyboard, an imaginary advertisement, even an existing product.

Why prototype?

- People respond better to concrete, visual ideas rather than verbal descriptions.
- User feedback on prototypes will improve your ideas more quickly.
- Prototypes let your users be part of the creative process.

Rules to follow when prototyping

 Consider who and how you will ask for feedback. Men and women often have different perspectives on what they value most and on family member needs. Focus groups with

- women alone can often yield insights that might go unheard in mixed groups.
- Always show at least three options, so users can compare and contrast.
- Present prototypes of equivalent quality, otherwise people will always pick the better drawn or better constructed one.
- Test out your prototype before showing it to users; you do not want it to break during testing.
- Prototypes should be built to answer questions; know what you want to learn when you build or select a prototype. For example, 'what is the optimal size and shape for the defecation hole?'

Encourage feedback – prototypes are 'sacrificial concepts', used to generate ideas and make changes. When testing with customers and businesses, encourage them to offer suggestions for improvements or changes, and do not try to explain or defend a particular idea. Be prepared to let go of ideas.

Box 6: 'User-centred design' for sanitation: useful tools and resources

The Bill & Melinda Gates Foundation's UCD in *Sanitation* microsite (<u>www.ucdinsanitation.com</u>) provides tips, examples and video stories from the field on how to apply design thinking to sanitation challenges.

The site's 'Tool School' offers step-by-step videos on how to use tools like speculative design, service blueprinting, pitch tests and design games for sanitation design. It also has links to a comprehensive set of design toolkits, guides, and courses. The microsite should have everything you need to get started and get inspiration. Participating organisations can also be reached, if you want to follow up directly to learn more about their work.

IDEO's 'Human-Centered Design' (HCD) approach is a process and a set of techniques developed by design firm IDEO to create new solutions, including products, services, business models and modes of interaction. The HCD field guide and toolkit has adapted the approach to developing country contexts, resulting in new product system designs for MBS like the one in Cambodia (see Figure 12). It is an excellent resource for sanitation product system designers. The full 'Human-Centered Design Toolkit' can be downloaded at www.ideo.com/work/human-centered-design-toolkit/. UNICEF has negotiated long-term agreements (LTAs) with human-centred design firms; a full list is available via Supply Division.

entirely new components, the design team should plan to go through the three phases (inspiration, ideation, implementation) about two to six times before finalising product system options and their costs, including transport costs and profit margins for the businesses who will deliver them. Each time you go through the design phases, you narrow down further and further, until you reach a final set of product system offerings that you feel confident your target low-income customers want and can afford, and that existing businesses can technically produce and profitably sell. Activities such as rapid unit revenue and cost modelling, small batch production, and transport testing should start during initial product design, but will likely continue for some months as ideas are adapted and refined. This early work during product system design will help you make final decisions on the right focal point businesses, delivery approaches and business models later in your MBS programme design.

Lowering product system costs

Affordability is usually identified by MBS target households as one of the key barriers to investment, so addressing costs of the product system is essential for an MBS programme. Drivers of cost identified in market research will vary from country to country, however, material transport costs and labour are often significant contributors to high cost of building improved toilets in existing rural markets (see Table 9). When developing product system designs or evaluating existing ones, below are some common design techniques to reduce costs while retaining or increasing desirability.

Re-engineer

Product system re-engineering can often reduce input costs and/or incorporate lower-cost components without sacrificing durability. Toilet system components are often 'over-built'. In Kenya, some masons build 8-inch thick concrete slabs that only span three feet and are strong enough to support a truck – this is expensive and unnecessary. Masons may not apply proper engineering methods and factors of safety to the

design of toilet components, increasing up-front material costs, transport difficulty and transport costs. Often this is done out of lack of knowledge or to overcompensate for poor manufacturing or material quality. By applying engineering principles during the product design process, it is often possible to reduce the amount of material and the weight and size of the toilet components, while increasing production rates. Examples from rural India, Benin, and Mozambique point to opportunities to reduce weight, materials and construction time while improving quality.³⁷ However, care must be taken to ensure that new designs will be accepted by customers and businesses. In Cambodia, for example, engineering innovations, including thinner rings and the use of rice husk ash for strengthening the concrete mix, considerably reduced costs and inputs, but were ultimately rejected by local producers.

As with local masons and suppliers, development engineers are sometimes guilty of 'overengineering'. Often done with good intentions, such over-engineering can make products unaffordable and stifle markets. 'Legacy products' from previous subsidy programmes can sometimes lead to rigid standards or techniques that are less suitable to the consumer market. Rural toilet product systems should be 'fit for purpose'; engineering efforts should be focused on reducing material inputs and simplifying designs without compromising structural or sanitary safety. If building standards are applied to the products, make sure that they are relevant and necessary.

Standardise the offering

Current toilet product systems are often custombuilt: each facility is made-to-order, with slightly different dimensions, specifications, and materials. Households and masons typically need to work out every detail. When there is no clear product system offering, it is often difficult for households or masons to estimate the overall price to complete installation. While some choice is critical, too many options and choices can lead to customer paralysis and delay. Consider standardising a base model and one or two upgrade options, with clear indicative

Figure 13: Before and after photo from Cambodia of new pour-flush product system design

The product incorporates two new pre-fabricated concrete components: the concrete box waste collection structure and a tiled slab with integrated ceramic pan.





price tags. Standardisation can help facilitate choice and make the entire purchase and construction experience more predictable for households. For businesses, standardised options with consistent feature sets (e.g. through the use of the same mould or set dimensions) can help them to provide consistent quality, reduce wastage, and improve efficiencies. In Bhutan, the Ministry of Health reduced the choices available from over 22 slab, pit and shelter options to three product system options, each with their own one-page promotional flyer. This contributed to a 45 per cent increase in basic sanitation in the pilot area after one year of implementation.³⁸

Offer multiple prices

Think of your product system portfolio as a 'sanitation benefits ladder' (see <u>Box 9</u>) whereby households can invest a little at first, and then make

incremental improvements to build on what they have. Rather than 'moving up' from one technology to another, think of the product portfolio as offering a core toilet design that people really want with progressively more value to customers for increasing price. Consider options for 'upgradeable toilets' (see Box 4), including ways to facilitate simple upgrades and retrofits over time). As you develop the set of product system offerings, look to include related options at different prices. It is useful if each of these the offerings bears some relation to each other, and uses the same dimensions, moulds and construction processes. This makes marketing easier and enables customers to see what they are (or aren't) getting. In Nigeria, businesses offer related product systems at different prices that share similar hole shapes, lids, foot rest features and overall geometry, including one option for retrofitting existing systems. In Asia, many concrete producers offer

an option of adding tiles or paint to concrete slabs, which adds to product cost but offers more choice (many low-income households chose to spend the extra money).

Aggregate products to reduce retail and transport burden

Product purchasing and transportation can be a logistical and financial burden on households. In most countries, households must typically go to two or more different retail stores, negotiate prices and arrange product transport to get everything they need for building their toilet. This can become an expensive burden. By packaging components into a single retail purchase with a predictable price, this burden can be greatly reduced. In South and Southeast Asia, this is often done by pre-casting and prefabricating concrete components and selling complete toilet kits.

Encouraging enterprises to offer home delivery as part of the product package is another way to reduce the burden on households. Consider these factors now, at product system design stage, and build on these concepts as you move into developing the delivery approach and business model.

Reduce the labour

In many countries, labour costs of custom-build toilets can comprise 70 per cent or more of the total cost of installing just the sub-structure and user interface. Households often must use masons because they have unique tools or masonry skillsets required to build a toilet. Masons also hold unique knowledge of the underground plumbing (especially water-based solutions) and what components must be purchased. By simplifying and demystifying the purchasing and construction process, you can increase customer knowledge and reduce household dependence on masons for highly customised solutions.

Focus on the substructure

Households will rarely understand how a toilet system is supposed to work (especially where the preference is for water-based solutions) and what is supposed to happen underground. In many cases, an MBS programme can be successful if it just solves the underground problem. For example, the 'core' toilet system offered through Cambodian MBS programmes provides a single, basic solution to toilet plumbing that people can easily understand, purchase and install.

Go smaller

Most households will probably tell you they want the biggest toilet slab possible – until they see the cost. Remember that the material usage goes up as the square of the product dimension. Reducing slab width or thickness can reduce materials and cost. Large slabs, shelters and pit liners are a luxury, not a necessity (see Box 9). As prototypes are developed to test new ideas, make sure households are made aware of the projected retail costs (even if it is only a rough estimate or range), so they can compare costs versus benefits when providing feedback.

Right-size the pits

In many countries, the bulk of the toilet construction cost is in the pit digging. In Kenya, pit digging rates can be more than US\$10 per foot depth, and households often want to dig pits of 30 feet deep or more. Frequently, these pits will collapse long before they fill up. Proposing a more reasonably-sized pit will help reduce installation costs dramatically.

Allow the user to make the superstructure

Shelters can cost a lot or a little, but they usually offer the same benefit from a hygienic safety perspective regardless of the cost. Many MBS programmes offer solutions for the sub-structure and user interface, but leave the shelter up to households to customise, to fit their family's needs and preferences. Typically, this will be acceptable because shelters (unlike underground 'plumbing') require similar knowledge to home construction, and households are familiar and comfortable enough with the principles to handle such construction on their own. Poorer households can be encouraged to start with a simple, natural shelter and upgrade over time.

Find the right price, not the lowest price

Trying to reach the lowest price possible can sometimes be counterproductive. A toilet is a significant investment for a rural household and makes a statement to neighbours and to other family members. In both Indonesia and Bhutan, households were offered the option of a low-cost 'dry' system as part of the suite of offerings. While the lowest in price, these waterless options did not meet low-income household preference and were eventually not offered. In Cambodia, although the cheapest entry-level core system included a slab without tiles, the vast majority of customers – including identified poorer households – opted for a tiled slab even though it added about US\$7 to the purchase price.

Design for emptying and safe treatment

In low-density rural environments, MBS focuses on the toilet system, since the capture and containment/storage part of the sanitation service chain is the critical public health issue. Even if you are not considering service design for the rest of the sanitation service chain, at this stage, you should consider what happens when the containment structure is full and how the product system may be emptied in the future (see the 'Sanitation System Fact Sheets' in WHO's 2018 Sanitation and Health Guidelines). 39 This means designing suitable access points to enable emptying. In many African countries, toilets are designed without access to the pit, requiring households in dense environments where space is constrained to break holes into the concrete slab to access the pit and empty the contents when they fill up.

Planning and managing product system design

When the market research identifies that products or product systems are non-existent or not fit-for-purpose, UNICEF will need to develop a plan for this design work. This is because designs, particularly with investment of public funds, should

Box 7: 'What about 'local solutions'?

There is often concern that MBS may somehow dampen local innovation or try to replace local low- or no-cost solutions. On the contrary – MBS product design builds on local solutions by:

- Designing with local communities, involving target households and businesses as designers, and getting community feedback throughout the process
- Gaining inspiration from good local solutions to design product packages that can be delivered more widely through the local private sector
- Helping businesses offer toilet systems that improve on local designs, so that households can access more durable, hygienic and sustainable facilities

be open source and available for all to use, as part of a conducive business environment.

UNICEF may choose to carry out product system design with its partners as a sector-wide public good, and pool resources across stakeholders to do this together. In this directly managed model, UNICEF will take an active role in supporting research and development – for instance through funding designers or an implementing partner. This is the most common model of product system design and has been successful in many contexts.

In mature markets where the private sector is more developed, UNICEF may consider an open call approach to drive other actors to adapt and create new solutions to meet consumer needs. This new approach has been used in other sectors and could provide lessons for the WASH sector to learn from. In this model, UNICEF provides information from market research and the research and development is done by other actors, with UNICEF encouragement. In this case, be prepared to answer questions about UNICEF's intention – or

³⁹ The fact sheets can be found as an annex to the *Sanitation and Health Guidelines* document. See Resources and further reading at the end of this section.

lack thereof – to directly procure new products. Note that businesses may not be interested in producing 'open source' designs once they have invested in their development.

Option 1: Directly managed design development

In this scenario, either UNICEF or its implementing partner will need to bring together a design team. A design team typically has a lead designer and a small group of others with relevant design skills and experience. The design team should propose a project plan and manage the day-to-day activities.

Whether UNICEF or an implementing partner carries out this process, below are five key steps you should undertake to manage the design process so that you get the results you want.

1. Create a TOR and design brief

A successful design process starts with a good brief that describes the desired results of the project (see Box 8 below) and will serve as a point of reference throughout the project. In the brief, present the problem, schedule and constraints clearly, and let the designers respond with a proposal describing how they will tackle the project. You will need to be comfortable with some level of ambiguity from the designers, since they will need time to move through the design process and will not know the exact outcomes of the process in advance. Note

that the best designers will want to amend and improve the brief with you. Insights gained from the field may actually lead you (and them) to change the brief even after the project has started. This design brief can be attached to the TOR.

2. Develop a rough budget and scope

The core product system design stage of MBS programming should take about 10-16 weeks, depending on the complexity of the project and the experience (and size) of the design team. It is important to factor in a budget for this work, including consultant costs, and expenses to support the team's field work and all stages of the process ('inspiration, ideation, implementation').

3. Finding designers

In bringing together your core design team, look to engage three to five people rather than an individual person – design is a creative process so a team will generate better ideas than an individual. It is okay to have only one *experienced* designer on the team; the rest of the team can be people with sector-relevant knowledge in the country or region, including local people with existing understanding of local culture and language and who can help facilitate, co-ordinate and build rapport with key stakeholders. Preferably, the team should include people with different skill sets and from different disciplines, and a mix of men and women. To evaluate potential lead designers, be sure to check their past design portfolios. Portfolios are

Box 8: What's in a design brief?

Background: What is the background and history of the issue you are trying to address?

Problem statement: Who are your identified target market segments? What were the primary product system insights coming out of the market research? What are the specific problems you want the design team to focus on?

Objectives: What prices and market segments do you need to reach? What technologies do you need to incorporate?

Milestones: What time-based benchmarks does the design team need to hit?

Success criteria: What would be a 'successful' project? What deliverables do you expect?

The design brief template at *Annex 8*, example design brief at *Annex 9* and example TOR for design at *Annex 10* can help you get started.

Box 9: The sanitation 'benefits ladder': A useful frame for developing your design brief

Rather than thinking about moving up the 'technology ladder' from temporary or unimproved to more improved technologies, the 'benefits ladder' takes the perspective of the target customer and asks: 'What is the minimum product system feature set that can deliver the improved toilet benefits that customers want most?' In this framing, costs increase with additional benefits.

The benefits ladder allows us to consider target price points for a menu of product system options based on the value they deliver to the customer. In your design brief, you can fill in a template benefits ladder with your market research insights and the cost data you have collected, including what your target market values most, and what (roughly) they might be willing to pay for these features.



far more relevant than written job experience summaries. Ask yourself if you like their work and approach. Have the designers worked in your rural contexts before? Do they have any relevant experience in sanitation? Do they demonstrate a clear design process? How well do they tell the story of their work? Remember that engineering skills are useful, but good design also requires creative skills and qualitative social research skills.

4. Evaluate the proposal

In addition to evaluating the portfolio of the designers, you will also need to evaluate their proposed approach. Look to see a clear description of their design process. Who do they plan to meet with? What kinds of questions do they want to

answer? How will they create and iterate upon ideas? How will they plan to implement those ideas? Did they give themselves enough time to undertake enough design and prototyping cycles? How well did they respond to the design brief?

5. Build stakeholder consensus

Strong design processes will have a small multistakeholder advisory group from government, NGOs and other sector experts who understand the overall MBS process and are available to periodically meet with the design team to share and evaluate feedback from the design process. Such stakeholders may already be identified through the process of stakeholder mapping, or through identifying partners for industry consultations. This will ensure that design directions and final design decisions have high-level buy in from sector stakeholders. It is often necessary to build stakeholder consensus, and there can be differences between what customers want and what sector professionals want. The design team will need to work within the defined parameters (for example, existing government guidelines): the less rigid or technical these are, the more the design team will be able to build on local innovation. Actively seek out updates, even if brief, on a weekly basis and ask for larger milestone meetings with the advisory group every three to five weeks, to ensure the design process stays on-brief and gathers support at all levels.

6. Supervise and monitor the process

The design effort should meet all the criteria that you set out in your design brief. The set of designed products system offering should meet clearly articulated functional, emotional and financial needs and desires of the programme's target low-income customers. They should facilitate the purchasing and installation process and build upon existing strengths of local businesses identified in your market research. They should provide a profitable income stream that businesses will want to pursue over the long term. You should hold the design team accountable for providing solutions that meet these criteria.

Box 10: Human-centred design with environmental health officers to develop lower cost product systems and avoid collapsing toilets in rural Malawi

Building on market research findings and successful experience employing an international consultant to work directly with UNICEF and district government teams to implement the work, UNICEF Malawi used human-centred design to refine toilet product systems. Their mission was to identify, prototype, and refine new designs and ways of building durable, desirable toilets (integrated sub-surface through slab interface designs) with little or no cement, and using local materials as much as possible, that households would want.

The first stage involved three-day workshops with up to 30 participants, based near to where 'user' participants lived and worked, at a location with a meeting room and outdoor space to construct prototypes. The workshops were held in three districts chosen to represent different contexts particularly in respect to the soil conditions. The workshops brought together teams comprising local builders/masons, householders and district environmental health officers. Each workshop followed a four-step process described below:

- **1.** Exploration: The teams discussed the pros and cons of existing village toilets and presented their findings in plenary.
- **2.** Discovery: Teams were then tasked to identify potential options to meet this design challenge:

- 'Create a toilet that matches what the majority of villagers want, need and can afford using locally available materials using little or, preferably, no cement'. Each team presented drawings of their design and after much discussion selected the three most suitable designs that they wished to prototype.
- 3. Prototype: Teams created small/medium sized models of their design with local available materials to explore construction challenges and make design adjustments.
- **4.** Feedback: Teams presented their prototypes to local community members (potential customers) to review options and obtain their feedback.

A total of nine design workshops were conducted, at an average cost of US\$2,000 per session in various locations in the three start-up districts, to cover different soil conditions such as typical clay, sandy, and water-logged. Emerging designs from each district were presented and shared at national workshops. Among the most promising designs is the 'corbel' toilet which involves local burnt or unburnt bricks with mud as mortar to partially line the top half of the pit in a 'dome' shape. There is also a version for water-logged conditions where the corbelled dome protrudes above the ground. Customers appreciate this design as it used locally available materials to provide a 'stronger, longer

Option 2: Open call for design development

This scenario is suitable for mature markets with a well-developed private sector. In other sectors with these characteristics, UNICEF has used market information to drive developers to adapt and create new solutions to meet consumer needs.

These lessons could be trialled in the sanitation sector where the private sector is mature and interested in investing their own funds into research and development. These steps could be carried out directly by UNICEF or via an implementing partner.

1. Defining the need

The first step in the process is to better understand both the consumer or end-user perspective as well as the context around the product system from key actors, such as national governments and implementing partners.

This should be based on the market research but it may be necessary to delve into specific requirements in greater detail through stakeholder consultations. The result of this could also be a design brief, as in the directly managed design development process outlined in Option 1 above.

Figure 14.a: Corbel design

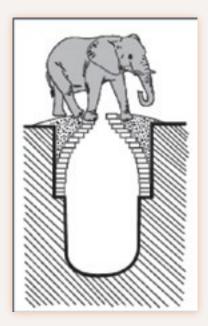
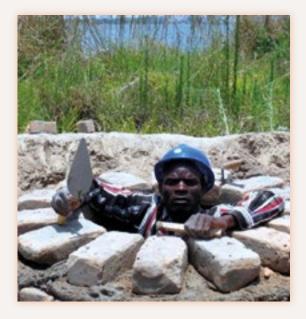


Figure 14.b.: Local artisan building the corbel toilet



lasting toilet' that is an affordable improvement on the traditional pit toilet, where the platform – made from mud and logs – is more susceptible to collapsing and termites. The estimated cost to rural householders was US\$35-80⁴⁰ in total for materials and labour.

The second, longer stage involved an adaptive

process to improve the design, building methods and business model. This took place over multiple years in rural Malawi in partnership with the 'SMART Centre' at Mzuzu University to create an information hub, testing and training centre for all new toilet designs.

⁴⁰ Cost of sub-structure includes labour for digging pit, labour from trained builder for corbel construction and cost of burnt or unburnt bricks (actual costs vary from location to location but burnt bricks tend to be twice the price of unburnt bricks).

2. Create a TOR and 'Target Product Profile' (TPP)

UNICEF or its partner can use a design brief or other documentation to develop a 'Target Product Profile' (TPP). The TPP should be broadly shared (specifically targeting relevant developers) to communicate the minimum and ideal desired product performance requirements, based on the specific context of target populations, regulatory requirements, the size of the market, pricing, potential use-cases and more. TPPs are less prescriptive than procurement specifications, in order to allow for creativity and product design flexibility. A 'Target Product Profile' template for UNICEF is provided in *Annex 11.*41

3. Develop a rough budget and scope

The timeline for responses to a TPP may be from 6 to 18 months, depending on the complexity of the desired product or product system. It is necessary to develop a rough budget for the project including all stages in the process, from need definition to scale up. Research and development in this scenario is left to the private sector, academia or NGOs using their own resources.

4. Launch and revision of TPP

After a TPP is launched, UNICEF works with developers to provide additional information on the TPP. Industry and stakeholder consultations are often organised to allow for a more direct dialogue around the TPP, and to facilitate collaboration between developers, regulatory bodies, and donors. UNICEF does not interfere in the strategy of developers (who they partner with, whether they are for-profit or non-for-profit, whether their solutions are intellectual property backed or open source, etc.). The engagement with developers is essential for UNICEF to assess whether and when the TPP requirements can be met, with what products and for which use-cases. This exchange often leads to amendments to the TPP.

5. Launch request for proposals (RFP)

Once the TPP has been finalised, a request for proposals (RFP) can be launched by UNICEF or its implementing partner. The RFP will include the TPP requirements, as well as the requirements for field testing and validation, and details of the potential market size and demand for the product or product system. RFPs should encourage flexibility to allow submissions to develop truly innovative solutions. However, the validation and field-testing requirements should be defined by UNICEF and the project partner.

6. Evaluation

Submitted proposals will need to be evaluated using criteria based on the minimal and ideal requirements in the TPP, as well as the proposed approach. Since the cost/affordability of products/ systems is likely to be included in the TPP criteria, it may be possible to combine technical and financial evaluation, or these aspects can be requested separately.

7. Validation and field trial

Validation of proposed products and/or product systems will usually take place via field trial. Clear criteria for assessment need to be established prior to implementation and sufficient time for the field trial allocated. This is likely to take several months. The costs, acceptability, replicability and sustainability of the proposed solution all need to be assessed through the field trial process.

Resources and further reading

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Annexes

Annex 7: Example questions for focus group discussions

Annex 8: Product design brief template Annex 9: Example product design brief

Annex 10: Example TOR for product design

Case studies and country examples – sources and further information

Benin

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3.3 Delivery approach & business model design

Quick reference

Determining the right type of existing local business(es) to be your 'focal point business(es)' and the best way to deliver new product systems to your target market Exploring and testing potential delivery approaches and focal point business What does it involve? model(s), including detailed cash flow and financial investment analyses Testing and trialling of production, distribution, transport and other delivery mechanisms, alongside testing of demand activation strategies, with focal point business(es) Clear identification of the delivery approaches and focal point business type(s) to reach your target markets with the new product system offerings One or more viable business models for identified focal point business(es) • A working understanding of how product system, business model and demand What are we trying activation activities will be integrated in implementation (Reminder. delivery to achieve? approach & business model design is best done in parallel with demand activation design) • Indicative understanding of business development needs and training tools and approaches that best suit your focal point business(es) for the implementation phase How long will it take? 4-6 months Business design, financial analysis, SME development skills, private sector experience (preferably in rural market context) New product system offerings designed, developed and tested, and other market research findings What skills • 'Business Model Canvas' and other business model design tools and resources are required? 'Sanitation Business Model Design' checklist • One or two pilot businesses to engage in testing • Budget for testing and trialling, including small batch production, distribution and sales

Overview

At this point, you have identified and listened to your target customers and developed a core product system(s) they want and can afford, and you have started interacting with existing customer-facing businesses that might be able to offer the product system(s). You have considered a few different types of businesses in the rural construction and sanitation market, and have ideas

about which ones could be the focal point business for your MBS programme. You have started doing the calculations to get a general idea of what the new product systems might cost to produce and transport, and what the main cost drivers will be. Now you are ready to determine what type of business(es) will be your focal point sanitation business, and to start identifying and testing how they can deliver the product system offerings in more detail.

Thinking like a business

MBS requires you to think of households as consumers. But just as critical to the process is treating the private sector as business partners. This means understanding profit, risk and investment; in other words, 'thinking like a business'. No matter how small a business is – whether a single independent mason or a family enterprise – there are always opportunities to encourage entrepreneurship and profitable business practices. This brokering of new relationships with the private sector is what sets MBS apart from other sanitation approaches.

Approaching sanitation as a business requires a shift in how government authorities and typical WASH organisations think and work. Whereas in the past, sanitation strategies often looked at businesses as input suppliers and contractors, MBS sees businesses as key partners and independent, viable enterprises to be influenced, supported and regulated, but not controlled or contract-managed.

A few related concepts are key to understanding any business:

- Profit: Profit is total revenue minus total costs.
 For a new business area such as sanitation, profit is the financial reward a business receives for the risk that it takes. Without enough profit from toilet or service sales, businesses will not be viable or sustainable.
- **Risk and investment**: Business risk involves making an investment in the hope of seeing a financial return. Investments in sanitation can be financial, for example to purchase moulds. equipment, stock, and inputs like cement, as well as providing customer credit (3.5 Reaching the poor through consumer financing). Investments can also be non-financial, for example time and effort to learn about new production methods or business management techniques. Although MBS programmes try to lower risks and barriers to entry for new sanitation businesses, some risk is essential: partner businesses must demonstrate they have a stake in the business by making up-front and ongoing investments.

The MBS delivery approach: considering your options

Your market research and product system design work should have clearly addressed the options for your identified target market segment. You can now focus on the type of delivery approach to reduce complexity in your target customer's 'pathway to purchase' of an improved toilet, and fragmentation among the rural businesses that directly serve them. This is a good time to re-consider and further analyse the consumer purchase pathway maps and the supply chain maps you developed during your market research (see 3.1 Market research).

The **delivery approach** is the (re-)organisation of different businesses selling goods and services in order to get the product system to the target customer the lowest-cost and most efficient way. Improved delivery approaches reduce the number of transactions and interaction points for customers to increase convenience and reduce costs.⁴² Delivery approaches can be differentiated by the degree of aggregation – that is, the ways in which products and services that comprise the product system are bundled or grouped together. The goods and services for a toilet system that a customer typically needs to procure include:

- Raw materials
- Construction and hardware materials
- One or more fabricated toilet components
- Transport and delivery
- Pit digging and installation
- Construction and installation advice
- Information and/or provision of financing options

Table 10 below presents four common delivery approaches, from little or no aggregation, to full aggregation. The focal point business is the primary customer-facing business typically responsible for doing aggregation of product components, services and information and to which sales promoters and co-ordinators at community level are linked (see 3.4 Demand activation). Each delivery model is suited to a different context, as outlined in the 'Market suitability' column of the table.

Table 10: Four common sanitation enterprise delivery approaches

	Delivery Approach	Description
Full aggregation ————————————————————————————————————	Mason/DIY	 Masons provide on-site, build-to-order service to customers in nearby villages, for standardised designs Masons might procure materials, or provide list for DIY procurement from associated business(es)
	Network	 Loose affiliation of businesses, with potential for any network business to be focal point Businesses in the network sell some components while connecting customers to others for procuring remaining inputs Focal point network business aggregates information for customers about other network businesses for remaining components and services to navigate purchase more easily and quickly
	'One-stop shop' (OSS)	 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 (delivery, installation) as optional add-ons May offer additional materials (e.g. for superstructure) Costs lowered, quality raised through pre-fabrication with increasing efficiencies at higher volumes
	'Turnkey service provider' (TSP)	 One focal point business aggregates all products and services needed to deliver the completed toilet system at a premium Reduces number of touch points to the customer to only one

Source: Adapted from USAID (2018).

The degree of aggregation will depend on the local market context and be determined through trial and iterative refinement. In some contexts, delivery models that aggregate various supply chain components may simplify customers' buying experience and reduce costs, while in other contexts customers may pay a premium for the convenience of aggregation. The degree of aggregation will be influenced by the geographic reach of businesses and the spread of target market

segment(s), level of fragmentation of the existing supply chain, customer willingness and preferences, and local enterprises' assets and capabilities.

When you consider higher level, national component manufacturing supply chains, it may be appropriate to consider the degree of aggregation and its influence on product cost and availability. Aggregation can be thought of in two ways: 'vertical integration' and 'horizontal

Market suitability

- 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

Common constraints

- Very small addressable market in remote, sparsely populated areas – masons have very small operational area
- Limited demand for sanitation among households
- Lack of capital, especially for moulds to cast a slab
- Works where toilet system components and services are easily available and 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 depends 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 already standardised and well understood
- 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 pre-casting, 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 pre-fabricated concrete/ cement products may limit reach to road-accessible communities and households
- 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 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

integration'. In some cases, integration can improve the efficiency of supply chains, using a range of partnership instruments such as license contracts, joint ventures, strategic alliances, contracts, associations, franchises, mergers and acquisitions.

Vertical integration happens when businesses acquire or partner with other businesses along *subsequent* parts of the sanitation service chain. A business is 'vertically integrated' when it

controls two or more consecutive stages of the chain. For example, imagine a company working in urban sanitation, using a waterless flush toilet technology. This company is providing two links of the service chain – capture and containment – and has partnerships with local partners who provide emptying and transport, who in turn have partnerships with businesses who produce energy and fertiliser for sale, using waste products. We can say that this business model is vertically

integrated, because it provides sanitation solutions across the entire sanitation service chain (capture, containment, emptying, transport, re-use).

Horizontal integration happens when businesses acquire or partner with other businesses within the same stage of the sanitation service chain. For example, imagine a local manufacturer of plastic products that enters into a long-term licensing agreement with a multinational manufacturer. The licensing agreement provides the local company with access to the multinational company's designs for sanitation products, such as pans. As a licensee, the contract benefits the local manufacturer through product and customer diversification, and the ability to use spare manufacturing capacity for a new business line (sanitation). As the licensor, the contract benefits the multinational company by providing access to

local distribution at low entry-cost, and utilises local capacity to provide their products. It is important to be sure that competition is not reduced through businesses partnering horizontally.

Where greater aggregation is feasible and desirable to customers and businesses, UNICEF or its partners can consider facilitating introductions, create conducive conditions, or even provide incentives for businesses to partner to more effectively deliver sanitation goods and services.

Selecting a delivery approach and focal point business

There are many factors to consider when choosing a best-fit delivery approach and focal point business. Your focal point business(es) must have sufficient reach and/or exist in sufficient quantity to

Box 11: What is a focal point business?

A focal point business is an existing local customer-facing business (usually, but not always, one already in the sanitation market), who becomes the primary contact for toilet product purchase by the customer. The focal point business provides information and facilitates purchase of components, materials or services for the new product system. The focal point business is typically the prime 'aggregator' of product components, services and information directly to the customer. Table 11 next page sets out things to consider when assessing potential for a business to become your MBS focal point.

What is a sanitation line of business?

Within a business or company, a line of business is a general term referring to a particular product or set of related products or service offering that fulfils a particular customer purpose – in this case, a toilet system. In rural markets, construction-related businesses involved in sanitation supply chains will rarely have sanitation as their sole line of business. This is because a toilet is not a repeat-purchase item – once a customer buys from you, they may not return to buy another toilet for 10-20

years or more. Thus, prior to and initially in your MBS intervention, the sanitation line of business is likely to comprise a relatively small, and seasonably variable, portion of total business revenue for your focal point businesses. This is important to bear in mind as you consider the viability of the initial business models you design.

What about other businesses in the supply chain?

Other businesses in the supply chain, for example upstream distributors, manufacturers (e.g. of cement or plastic components), or single component retailers are of course important to understand and analyse, especially in terms of the extension of trade credit and relationships with rural retail businesses. It may be the case that your programme will need to engage at a high level to address major supply chain bottlenecks. However, the vast majority of your time and energy – especially in the design phase and early implementation of your MBS programme – should focus on selecting, recruiting and supporting focal point business in an optimal customer delivery approach.

directly service your target market. If your product system options are made of pre-fabricated concrete products and you decide, for instance, to work with concrete block producers, but later find that they can only be found in small numbers in the main district towns, you will run into difficulties.

Your delivery approach and business model should be designed to reach and sell to low-income households lacking basic sanitation, considering their geographic 'market proximity' segment.

Well-designed market research should map out numbers and types of customer-facing businesses involved in rural sanitation and construction, in each market proximity segment, so that you understand the scope, reach and quantity of different types of available businesses, including masons, retailers,

raw material suppliers, cement block/concrete manufacturers and others. For smaller-scale businesses, you will need to consider the potential geographic reach and main customer segment of the focal business. What is a realistic market catchment for them? Masons may only service their own communities and those immediately neighbouring them. District-level businesses may service a wider area, and national-level manufacturers a wider catchment still, but might not consider rural households as important for their business. Table 11 identifies characteristics to consider when assessing an individual business's potential to serve as the MBS focal point business. Information on these characteristics can be collected using the 'Business Model Canvas' tool (Annex 3) during supply side market research.

Table 11: Favourable and challenging characteristics to consider for selecting potential MBS focal point businesses

COMPLEMENTARY/FAVOURABLE

- Has large and/or important portion of customers that match MBS rural target market household segments
- Already reaches or is able to reach a large number of surrounding rural communities/households of interest for MBS programme
- Good relationships with upstream suppliers
- Receives supply chain credit for purchase of goods from their suppliers
- No/few stock outages
- Regular procurement and adequate transport from their key upstream suppliers of construction/sanitation goods
- Does basic record and book-keeping
- Extends customer credit to MBS target market segment
- Access to some financing for capital investment in business assets, growth or inventory, either from own/ family or MFIs
- Established reputation in the community for fair pricing, good quality
- Owns vehicle/s for customer delivery or transport of goods, or has good working relationship with independent transporters
- Stores/yards available for stocking adequate inventory
- Interested in and looking for opportunities to expand rural household customer sales for sanitation or complementary construction lines of business
- Has experience pre-casting concrete
- Has introduced new products or services successfully in the past, has plans to do so again, and/or interested to take risks again

MISMATCHED/MORE CHALLENGING

- Most of customer base is construction contractors, NGOs, government, institutions, other businesses, or wealthy urban/modern households; rural households minor or unimportant to the business
- Lacks supplier credit
- Lacks basic record or book-keeping
- Does not or is unwilling to extend customer credit
- Very small or no market reach in surrounding rural communities of interest for MBS programme
- Little or no interest in expanding reach to serve more rural communities, rural households
- No stores or storage yard/space to stock increased inventory of construction or specialised sanitary wares
- No experience pre-casting concrete
- No relationships with construction material transporters, or ability to transport
- No interest or significant barriers in expanding sanitation line of business
- Unknown reputation in target areas



Case study 5

Learning what works by testing different MBS business focal point delivery models: PSI's experience in Bihar, India

In 2012 PSI launched the first MBS project in India in Bihar, partnering with Water for People and PATH, and funded by a US\$8.7 million grant from the Bill & Melinda Gates Foundation. At the time, only 18 per cent of households in Bihar had a toilet. Market research identified barriers and opportunities to improve the local market, as well as key insights for product systems and new business model designs. This included a need for aggregated business models to simplify the purchase process.

Working with its partners, PSI developed lower cost appropriate toilet product systems, based on customer preferences and market suitability. Through standardisation, re-engineering and component pre-fabrication, the costs, labour and delivery time for product systems were reduced and quality was improved, without sacrificing customers' non-negotiable features. The project then decided which consumer-facing businesses were best suited to be focal points, and which delivery model would best simplify the customer purchase process. A landscape study that was carried out at the beginning of the project as part of the programme's market research suggested two models: a 'turnkey service provider' (TSP) model and a 'network' model, with cement ring manufacturers (CRMs) as the focal point businesses. Considering the fragmented supply chain and desire for a high level of aggregation, PSI selected the TSP model in which local entrepreneurs (such as hardware store owners) would become the focal point business, offering customers a single transaction price for end-to-end delivery of the toilet system packages, including transport, installation, construction management and all materials. PSI identified entrepreneurs to set up the model and provided training in construction management, which was new to many of them. As the TSP model required the entrepreneur to

procure and manage all of the costs and labour prior to receiving customer payment, PSI supported the new TSP entrepreneurs with access to credit and capacity building.

Within nine months, regular sales monitoring showed that expected outcomes were not being achieved. Talking to customers, PSI learned why the TSP model was not working. The premise of TSP model was that the cost of delivering a TSP toilet would reduce at a certain scale of sales, which in reality the entrepreneurs were not able to achieve, due to limited catchment areas and increased transportation and storage costs. High customisation by the customers further delayed delivery of the toilet, making the return on investment for the entrepreneurs very low. Programme monitoring suggested that customers preferred to buy the key toilet components for the substructure and interface directly from local CRMs, because they were seen as a traditional sanitation business for toilet purchase. Despite the efficiencies of aggregation, customers were uncomfortable buying from the hardware stores who were not traditionally part of the local toiletbuilding system. Hardware store owners also lacked expertise in service provision, struggled with managing construction labour and quality, and the toilet itself was more expensive, because of the added margins. Lastly, the TSP model required high working capital, and the new financing options brought substantial risk for existing small- and medium-enterprise lenders.

As a result, PSI made a course correction to focus on a new 'CRM+' model, with the CRM as the focal point business for toilet construction, creating a more flexible delivery model which linked them to other businesses needed to build a toilet. In the CRM+ network model, CRMs are the first point



of contact and purchase for a customer seeking the new product system package. Customers were free to purchase all or some of the toilet components from the CRM and receive guidance on the additional materials they needed to construct the rest of their toilet, and referrals to networked businesses to acquire them. CRMs were well suited to advising customers and had expertise working with and managing masons and providing sanitation construction services. The model had a lower final cost and the savings were worth the effort to customers, likely because local construction markets are easy to access and highly competitive.

As the focus shifted to building up the network of CRM+ business partners, sales rapidly accelerated. The model was easy for CRM businesses to adopt,

needing much less PSI support compared to the TSP model, making it easy to replicate as the programme expanded geographically. PSI support included training CRMs in quality production and service delivery, providing customer-focused information, and helping generate sales through demand activation. In October 2016, PSI had trained over 750 CRM businesses and facilitated the sale of 77,000 new pour-flush toilets to first-time rural customers. By the end of the programme in 2017, sales had reached 204,409. A 2015 assessment indicated 39% of sales were to the poorest households, and that an important contributor to successful outcomes was the provision of capital for loans and loan guarantees to an MFI partner, for customers and small business financing.

Nearly all decisions about the right delivery approach and focal point businesses to work with will be driven first and foremost by your target market and the product system offerings you have developed. It is often possible to deliver the same product system through different delivery approaches and business models. For example, a concrete-based product could be pre-cast on-site at the customer's home by a mason. The same product could also be manufactured by a business located along a transport route and then transported by truck to a village. Now, you will systematically examine the options to see what works best. This will involve both technical and financial analysis of different business types and a mapping of all the possible production, distribution and transport solutions.

It often makes sense to test two or more different delivery and business model options and combinations. In Bihar, India, the MBS programme tested a turnkey service provider (TSP) model and a network model. They found the network model with a concrete ring producer as the focal point business was far more effective in reaching more low-income customers in the programme's target geography (see Case study 5 above). On the other hand, in East Java, Indonesia, the government-led MBS programme abandoned their mason DIY model after several years in favour of a more effective 'onestop-shop' model, operated by a rural sanitation entrepreneur/contractor (see Case Study 7 from Indonesia). Approach this testing phase with an open mind, and do not assume that you must work with a particular business type, such as masons. When you reach implementation, it is best to start in communities in relatively more accessible zones (e.g. nearer to roads and market towns) and consider a progressive expansion of services to less accessible zones, but only after focal point businesses in these accessible areas are efficiently and profitably selling the product system. You will need to keep this in mind as you develop delivery and business models.

Understanding business models

In testing different delivery approaches with potential focal point businesses, you will need to go further than just ensuring a sufficient quantity of a given business type in your target area. You will need to understand their existing business models and help them to consider how to redesign the business model for their sanitation business line. This includes understanding up front what it will take to make sanitation a sufficiently profitable line of business, in absolute terms and relative to their other business lines. This requires going beyond just understanding unit profitability to understanding the number of needed toilet sales per month and year, price to charge, and associated revenue and profit.

A business model defines how a business creates, delivers and captures 'value' – the benefit that customers receive by using a product or service. MBS interventions create value for customers by focusing on: improving the product and service offerings; reducing their costs; and 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. The 'Business Model Canvas' tool (see *Annex 3*) provides a framework and tool for thinking about business models that covers the four main areas of a business:

- Offering: The products and services that
 a business offers to meet the needs of its
 customers. These are the value proposition of
 a business and what distinguishes the business
 from its competitors.
- 2. Customers: The different customer segments that a business tries to serve with its offering. The channels through which the business delivers value to the different customer segments (e.g. retail store front, village events, etc.) and the relationships that a business creates with its customer segments.
- 3. Infrastructure: The key activities that the business performs to achieve its value proposition. The key resources that are needed to create value, which can be human, financial, physical (assets such as equipment, vehicles, warehouses, stores, land, staff etc.) or intellectual property. And the partners needed to complement a business so it can focus on its core activities (e.g. suppliers, service providers, transporters, lenders, etc.).
- **4. Finances**: The **costs** of doing business (including fixed costs, variable costs, economies

of scale, etc.) and the **income** that comes from sales to customers in each customer segment (which may include sales of goods, services, usage fees, subscription services, etc.). Income has to be greater than costs for a business to be profitable.

During your market research, you assessed existing business models using the business model canvas to find out how and where they are working and not working. Now you are ready to consider what changes can be made to improve existing models, or what new business models might be able to deliver new sanitation options to your target markets.

Working with focal point businesses to improve business models

Designing (or more typically improving) sanitation business models involves trade-offs. For example, you may find that the cheapest possible product system design is not something consumers are willing to invest in, but adding key features (e.g. tiles, paint) or services (e.g. home delivery) can help businesses to greatly increase consumer value and trigger sales, even though it raises the final retail price. On the other hand, you may find that businesses simply cannot deliver certain features or options that consumers want (for example, due to limitations in access to raw materials, moulds or other components). In this case, you will need to work within the market constraints, helping businesses deliver the important benefits, even if the final product system design is less than 100 per cent of consumers' vision of their ideal toilet.

All business models will have advantages and disadvantages. In the end, the best models will be those that adequately address consumers' needs and the four key areas of the business, with enough profit to sustain and grow. The essential thing to remember is that the right business models and products will be completely determined by the existing market barriers and opportunities: 'transplanting' a model from one context to the next may work some of the time, but only if both

the demand and supply market conditions happen to be similar.

It is critical to carry out business and financial analysis with existing business types to understand their current models, and especially their revenue and cost structures. Ensure your team has the skills to do this – whether through developing skills internally or working with partners. It is not enough to define a delivery approach and identify a business type. You must also understand what impact a proposed approach will have financially on an individual focal point business, including how the sanitation business line fits into their broader business operations. Table 12 maps two common sanitation delivery approaches to using the business model canyas.

Changing the way we engage with the private sector

Many sanitation programme supply-side strategies have not gone to scale because they make the wrong assumptions about what consumers want, what the main market bottlenecks are and how best to address these. The cause is usually failure to invest in good quality MBS design, informed by actionable market research. For example, the sanitation sector has learned the hard way that training masons in technical construction alone is usually not enough to catalyse a sanitation market, if mason opportunity costs of finding new customers and engaging them in building toilets are too high. Even in existing MBS programmes, lack of proper upfront market, business and financial analysis has been identified as a primary constraint to success.⁴³

Using the same business model canvas you used for existing businesses in your market research, you can map the *infrastructure* required for masons to offer sanitation services and understand the *finances* involved (*costs* and *incomes*). These can be compared to the efforts and profits masons make from their other *offerings*, such as house construction, farming, or sale of labour. By not considering the opportunity cost to the mason, your

Mason DIY delivery business

Offers small range of standardised designs/price points, that can be customised

- Usually offers full pre-cast production and installation service at customers' homes in exchange for cash
- Builds on existing masonry skills, but usually requires some training in new techniques, standardised designs to lower costs and increase value

'One-stop shop' precast concrete focal point business

- One-stop purchase offers easier more predictable purchase experience, for small range of standardised designs/price points, cheaper than separate purchases and customised construction
- Can involve centralised manufacture and/or precast on-site production/ installation
- Innovative models include home delivery (and sometimes installation, for an additional fee) to reduce transport difficulty, speed installation
- Modular designs allow for self-installation, expansion (e.g. second pit)

Segments:

- All households within a mason's village or nearby villages with a poor-quality toilet or no toilet
- Build in stages or offer instalment payments to lower income quintiles

Segments:

- All households without toilets or with poor quality toilets within a feasible transport distance
- Initial all-cash sales aimed at higher income quintile 'early adopters'
- Instalment payments may be offered to expand sales to lower quintiles

Relationships:

- · Long-term, multiple transactions
- Customers and masons typically know each other and have conducted business in past and/ or may do so in future

Relationships:

- Can be short-term transactional relationship
- Sanitation often used as an 'entry point' to expand rural client base for other pre-cast concrete products (concrete grave stones, house posts, rain water tanks, etc.) and/ or construction materials (e.g. gravel, sand, cement) and services

Channels:

- Reach new customers through communitybased sanitation promoters and referrals by local government and/or CATS actors
- Word-of-mouth from neighbours and family
- Interpersonal communications are usually most effective: village events, door-to-door sales

Channels:

- Reach new customers through communitybased sales promoters and referrals by local government and/or CATS actors
- Often pay sales promoters a small commission for each toilet sale
- Interpersonal communications are usually most effective: village events, door-to-door sales

Customers

Mason DIY delivery business

Key partners:

- Community-based promoters, village WASH committees, local government & NGOs
- Other semi-skilled or unskilled labourers, such as pit diggers
- Sometimes in business relationships with material suppliers
- Sometimes certified by government

'One-stop shop' precast concrete focal point business

Key partners:

- Suppliers of raw and construction materials, toilet components
- Community-based sales promoters (often commission-based), local government & NGOs
- Sometimes in business relationships with preferred masons, or directly employing mason teams
- Sometimes certified by government or part of industry association

Resources:

- Light-weight portable moulds
- Masonry tools
- In some cases, moulds provided by external programmes

Resources:

- Concrete fabrication equipment (e.g. moulds, mixers, hand tools)
- Adequate space for concrete casting and stock
- Truck and/or motorcycle with trailer
- Labourers and/or mason teams
- · Capital to build stock and buy equipment
- · Access to raw materials, water supply

Key activities:

- Sub-structure and interface construction, including pit lining, foundation, slab fabrication and others
- Manage basic financial transactions

Key activities:

- Production and pre-casting of concrete toilet components
- Delivery of pre-cast components
- Financial, sales and inventory, and human resources management

Revenue streams:

 Sales of services for toilet construction (often with some pre-payment and instalments)

Revenue streams:

- Cost-plus model (cost of all inputs plus a profit margin)
- Discounts for group bulk purchases
- Small premiums for add-ons (e.g. delivery, installation service)

Cost structure:

Financial viability

 Negotiated price for services (household responsible for raw materials)

Cost structure:

- Fixed investment in fabrication equipment (and transport vehicle)
- Variable investment in raw materials, marketing costs (brochure & banner printing), vehicle fuel and maintenance
- Per-sale commissions to sales agents

nfrastructure

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training efforts may result in many 'trained' masons, but very few actively involved in selling sanitation.⁴⁴

Similarly, experience has shown that 'SaniMarts', which are set up as physical demonstration sites or shops by external programmes to sell only sanitation products are not viable. ⁴⁵ Analysing these situations with the business model canvas, we often find that SaniMarts are not viable because the cost *structure* and *resources* required to run a fixed location business cannot be covered by the *revenue* generated by selling only sanitation, and that there is not a large enough *customer* base at the rural level where these shops are being established.

<u>Table 22</u> (in <u>4.1 Programme implementation</u>)

discusses initial business engagement in much more depth, including common pitfalls from past MBS experience. You should review these potential pitfalls and try to avoid them through good business model design.

Planning and managing the testing process

MBS programmes must look holistically at a business, do the financial analysis, and generate new ideas on how it can profitably reach new markets. This means focusing in particular on the 'last mile' of rural distribution to get products and services out to new customers in communities within reach, as well as harder-to-reach places. Here are some tips to consider as you undertake the delivery approach and business model design process:

1. Use the insights from market research and product system design to identify potential delivery approaches and focal point businesses

Do not skip directly to business model design. Start with an analysis of your market data (especially the concentration of different business types in your area) and use it to carefully assess different options. Be open and flexible to potential approaches but try

to quickly rule out options that will not be feasible. Engage different stakeholders in the process of analysis, discussion, and additional data collection as needed. Once you have decided on the focal point business types you want to test with, track their attributes so that you can later understand which groups perform better: for instance, large-scale concrete ring manufacturers along a major road or in a district town, versus small-scale concrete ring manufacturers on the outskirts of small towns or in the village. Critical factors such as turnover, revenue, staff and others will determine which individual businesses in each business type might eventually become programme partners at implementation.

2. Conduct iterative experiments and real-time trials

The best way to learn what works is to convince one or two businesses to invest in the opportunity, and then help them to test options on the ground. This might include setting up small sales and distribution trials, producing a small batch of products for testing, experimenting with packing, stacking and transport options, or trialling different ways to link businesses to your demand activation activities.

In Lao PDR, programme designers worked with two potential one-stop-shop concrete producer businesses to test different production, distribution, and demand activation sales options through a series of small-scale 'mini-pilots'. Over a few weeks, these businesses agreed to prepare a small batch of stock of the new low-cost product system offerings, to arrange truck transport, and to attend a small number of direct sales events where village-based promoters were offered sales commissions.

Although the trials were done in only six villages, they allowed the team to test production, transport, order-taking, payment systems, and sales tactics in a co-ordinated way, generating immediate practical feedback on actual costs, potential problems, and opportunities. ⁴⁶ This led to a further round of business model refinement and final financial and

⁴⁴ Water for People (no date) explores lessons learned from the failure of a mason model in Malawi. See Resources and further reading at the end of this section.

⁴⁵ See R. Kumar, et al. (2011), and S. Hanchett, et al. (2011) for evaluations of rural sanitary marts in India and Bangladesh respectively Details in Resources and further reading at the end of this section.

⁴⁶ Pedi, et al. (2012). See Resources and further reading at the end of this section.

business model analysis. Be sure to include time and budget for at least one or two rounds of trials, depending on what you might need to test, and plan for teams to be based in or make extended visits to the field for this work.

3. Be flexible and bring in the resources you need and/or make sure you have the right the people in-house

At this stage you are in design and testing mode; you are not yet ready to begin 'selling' the opportunity to a wide range of businesses. While you will be gathering insights about the new types

of information or skills that might be required for your focal point business, you are not yet ready to begin preparing detailed training or business support materials. The business proposition and any necessary business development support will be developed only after you have established your business models and promotional and sales strategies – and shown that they work in the field.

At this stage, you will need creativity and business thinking – consider seeking out and recruiting local expertise, such as rural business development service providers who can help you work through the details.



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WSP (2013). Sanitation Market Transformation in Indonesia: Designing Viable Business Models. (Field note).

Annexes

Annex 3: 'Business Model Canvas' tool

Websites

'Business Model Canvas' tool. At: www.businessmodelgeneration.com/canvas

'Business Model Canvas' (App). At: www.businessmodelgeneration.com/toolbox

USAID: 'WashPaLS Enterprise Viability Toolkit'. (For business financial analysis, definitions, tools). [Forthcoming]

Videos

Alex Osterwalder. *Business Models Beyond Profit*. Available at: http://slidesha.re/15BMIJ



3.4 Demand activation

Quick reference

What does it involve?

- Determining the MBS communications objectives and sales and marketing strategy for demand activation
- Creative design and pre-testing of communications activities and tools, with a focus on 'below-the-line', interpersonal communication (IPC)
- Mini-piloting of demand activation activities and messages jointly with delivery approaches and focal point business (see section 3.2)

What are we trying to achieve?

- Identified candidates or actors to work as sales promoters and co-ordinators to generate sales in target communities linked to focal point businesses
- A creative concept and pre-tested IPC activities and tools for front-line sales promoters and partner businesses
- A demand activation strategy and plan, including roles for local government actors and sales promoters, to motivate customer interest and trigger a decision to purchase the new toilet product system offerings

How long will it take?

3-6 months

What skills and resources are required?

- Communications design, rural direct marketing and sales skills
- New product systems, and findings based on your market research and product system design work on target customers' motivations, desires, perceived advantages of the new product systems, and the places and channels to directly reach and effectively engage them
- Clear creative brief(s) based on market research findings and new product system offerings
- Budget for creative design and pre-testing with target customers, front-line sales promoters and focal point businesses

UNICEF equity and gender reminders

- Select demand activation channels, activities and methods that reach and directly engage rural households in the two lower income quintiles as well as the middle
- Ensure that the portrayal of women and men in sanitation communications and marketing materials does not reinforce negative gender norms, roles or stereotypes
- Make efforts to recruit and train women as well as men for paid promotion or commissioned sales positions, and consider gender differences in training

Overview

During this part of the design phase, you will use key insights and customer findings from your market research and product system design to inform the content of communications messages, and identify the best ways to reach and persuade target customers to invest in basic sanitation and purchase the new product system offerings. At the same time, you will identify local actors to work as 'demand activators', also referred to here as 'sales promoters', and develop direct sales and marketing activities and materials to raise awareness about the new product system offerings, as well as helping focal point businesses to reach, promote and sell these offerings directly to households.

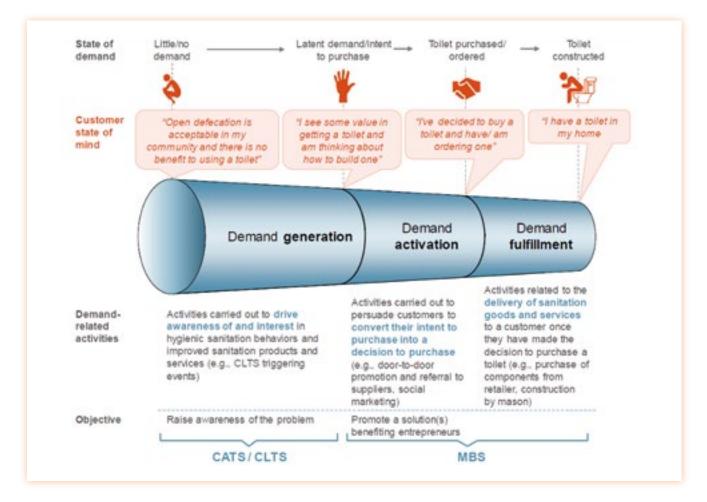


Figure 15: Phases of sanitation consumer demand

Three demand activation communications objectives in MBS

Promoting and activating demand in MBS is just one component of a broader behaviour change communication strategy for achieving safe sanitation and hygiene for all that addresses the first phase of demand generation, for example through CATS/CLTS. In MBS, we focus on three main communications objectives:

Objective 1: Reinforce CATS messages to stop open defecation (OD)

MBS communications reinforce CATS messages by using creatively designed tools and materials and additional community engagement activities, if needed. Figure 16 gives examples from WaterSHED Cambodia's 'Hands-off' MBS programme, which was used to re-enforce the disgust of essentially 'eating shit' from open defecation and promote toilet use as a cultural norm.

Objective 2: Motivate household investment in a durable hygienic toilet

MBS communications aim to position private ownership of a hygienic durable toilet as highly desirable by using persuasive messages. MBS programmes often use humour and emotion to highlight the personal inconveniences and disadvantages of open defecation or the dislikes of unhygienic toilets. For example, Figure 17 shows one of a series of communications tools from Benin's 'National Rural Sanitation Promotion Programme', highlighting lack of safety as a disadvantage of open defecation (other examples of MBS programme communications materials can be found in Annex 14). At the same time communications promote the private benefits of investing in a good toilet, using the consumer insights and key drivers from your market research and from your product system design work.

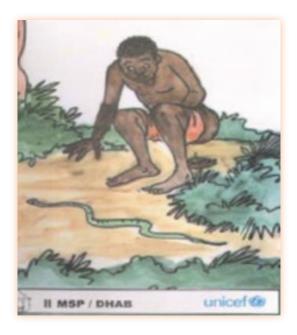
Figure 16: WaterSHED Cambodia 'Hands-off' MBS communications







Figure 17: Communication tool from Benin's 'National Rural Sanitation Promotion Programme'



Objective 3: Raise customer awareness of new product system offerings and support sanitation businesses to promote and sell them

MBS communications actors and activities are needed to:

- Introduce the new product system offerings directly to households, including their costs, their key features that consumers care about and want, how they are installed and operated, and how to purchase and build them.
- Introduce focal point businesses in the area that can supply the new product package and service offerings to households.
- Equip focal point businesses with generic, easy-to-understand simple advertising tools

- (e.g. flyers, business cards, banners, product catalogues, installation instructions) that can be easily and cheaply reproduced, personalised, and distributed by them to promote their specific products and service offerings (see examples in *Annex 14*).
- Train and support front-line sales promoters to give consistent, effective sales pitches to overcome objections and convince households to invest.

Tools and messages should draw directly from the insights gained from customer consultations during your product system design stage, regarding things customers like and care most about the new product systems, and information customers want to know about them, such as how they are purchased, delivered and installed. Are

Table 13: Gender considerations in the MBS process

Case	Sanitation consumer demand situation	MBS communications objectives to be addressed
1	Main sanitation problem is open defecation and people are unfamiliar with toilet building	All three objectives
2	Main sanitation problem is use of unimproved (unhygienic, temporary) toilets and unawareness of improved toilets	Objectives 2 and 3
3	People aware of improved toilets, know what style they want, but main problem is cost and local access	Objective 3

households most interested in functional benefits like durability and strength? Or are they concerned most with cost and construction quality? This third communications objective will also depend on the delivery and business models used to produce, distribute, sell and install the new offerings, so close co-ordination between this work and your business model design work is essential.

Which objective should you focus on?

<u>Table 13</u> above presents different sanitation demand cases for MBS and the relevant communications objectives that your MBS demand activation strategy will need to address.

Case 1: High open defecation

As long as open defecation is being practiced, CATS or other community-wide mobilisation methods should continue to be used and MBS communications should address all three objectives. This case is an opportunity to jump directly to better-quality facilities that provide basic sanitation services and provides the fastest sales growth opportunity for MBS business partners.

In rural Benin for example, OD rates were high and most households had never thought about building a toilet before the national sanitation promotion programme began in 2002. Demand activation followed a sequence of communications activities,

beginning with demand creation through a villagewide meeting using 'Participatory Hygiene and Sanitation Transformation' (PHAST)-inspired tools to mobilise the community to stop OD and build toilets (**Objective 1**). This was followed quickly by home visits to each household by trained community-based volunteer promoters using communications tools to motivate investment (Objective 2). Promoters returned to motivated houses for a second visit to introduce new toilet designs at three price points and the steps required for planning and building (Objective 3) and then introduced them to programme partner masons to negotiate and prepare building plans, while continuing to advise households on construction steps. For more details on the demand activation activities used in Benin, see WSP's 2011 field note in Resources and further reading at the end of this section.

Case 2: High unimproved services

Where communities have achieved open defecation-free status, or where there is already a tradition of using household toilets, but those toilets are unimproved facilities providing a poor level of service, MBS demand activation can concentrate on Objectives 2 and 3. This is the case in many Eastern and Southern African countries where using pit toilets is a long-standing inter-generational practice. The pace of sales is often slower for businesses and limited by the rate of toilet replacement.

Case 3: Affordability challenges

If market research shows most households are already motivated to invest in a particular improved toilet design, but lack access to affordable quality product systems and services, MBS demand activation can concentrate on Objective 3. In Cambodia, market research found that over 90 per cent of households without any toilet who defecated in the open had thought about building a toilet, and knew which model they wanted, but could not find local suppliers offering what they wanted at reasonable prices.

Communications methods for MBS

Three major types of communications methods for MBS are outlined below in Table 14.

Below-the-line interpersonal communications that engage with target customers directly are considered much more cost-effective and powerful for activating demand than above-the-line mass media methods (see Box 12 below). 'Direct consumer contact', contrary to its name, functions mainly as an above-the-line method – it acts in a similar way to mass media, just on a smaller, seemingly more intimate scale.

Interpersonal communication uses two-way dialogue with small groups or an individual to convey multiple interlinked messages, to answer questions, and to build trust between the target audience and

the sales promoter. Examples of IPC tools include flip-chart stories, role plays, image cards and other materials that are used with target customers in a face-to-face, interactive setting. Experience with MBS has shown that rural households are most influenced to invest in basic sanitation by talking to trusted sources of information such as neighbours, relatives and friends. They also learn most about toilet designs from direct exposure to the product system offerings, for example, by seeing, touching and 'trying' them at a village triggering or sales event, or at an early adopter neighbour's home.

Mass media channels are limited to one-way messaging, for example through mainstream radio, posters, or billboards. They may reach more people, but typically few of them are your MBS programme's target customers. While this type of messaging is good to raise awareness and reinforce personal experience, it is unlikely that a radio spot, poster or billboard – even when it manages to reach a target customer - will motivate them to buy by itself. TV is expensive, and usually has very poor reach among poor rural households. On the other hand, local radio may have good rural penetration in some countries. If a local radio station is identified during market research as a widely used regular source of new information in the majority of rural communities and households in your programme pilot area, consider including a budget for design and testing

Box 12: Below-the-line vs. above-the-line communications

Below-the-line communications and marketing involves *promotional* methods that seek to directly engage with target customers in person, to promote a company's or organisation's products, such as an in-store/in-person demonstration of a product that consumers may wish to investigate in person. These contrast with above-the-line methods, typically involving mainstream radio, television, billboards, print and film formats, designed to reach a mass audience. They cast a very wide net, potentially reaching thousands to millions of people, but many or most viewers will not fit the product's target customer.

Below-the-line methods tend to be less expensive and more focused. They allow for closer interaction, where a salesperson can answer direct questions and better explain the products. Below-the-line communications reach far fewer people than above-the-line, but are far more selective in who they reach. From a budgetary perspective, the return on investment (ROI) for below-the-line advertising is generally higher than ROI for above-the-line communications, because the former typically can be more easily and cheaply executed, tracked, and controlled.

Table 14: Three types of social and commercial marketing communications

Method	Description and examples	Main purpose
Interpersonal communication (IPC) ('below-the-line')	Two-way facilitated dialogue, in small groups or with individual household decision-makers	Ask/answer questions about the product, build skills/confidence, problem solve, provoke thinking, persuade, change attitudes
Direct consumer contact (DCC) ('above-the-line')	Scripted events (theatre, product demonstrations, mobile video), using 'edutainment' approaches at venues/ locations with large audiences	Raise awareness, introduce new products, convey information, provoke thinking, reinforce IPC messages
Mass media ('above-the-line')	TV advertising, radio, print (posters, billboards, banners, t-shirts, hats, flyers, placards, shop signs, etc.)	Raise awareness, convey information, remind and reinforce IPC messages

Source: Adapted from WSP (2011). Introductory Guide to Sanitation Marketing.

of creative radio communications to complement your MBS community-based IPC activities. Remember to fully consider the rural reach and past effectiveness for the middle and bottom two rural income quintile segments, when investigating rural mass media channels such as radio, billboards, and posters during your market research. Often the poorest rural households have the least media exposure, rarely leave their village, and are best engaged directly in village-based small groups and through door-to-door interaction.

IPC also differs from direct consumer contact (DCC), which typically involves scripted events requiring large budgets for skilled professionals, event equipment and set-ups, and travel costs. This often limits DCC reach to audiences in larger towns with few target customers and increases demand activation communications costs for MBS replication and scale-up.

Prioritise community-based IPC for demand activation

IPC activities and tools implemented in the community by local government actors and community sales promoters are flexible, adaptable and replicable for reaching and persuading rural households where they live in their communities. They can be used in community meetings, at village sessions following CATS triggering, and in one-to-one motivational visits or sales pitches to individual households.

Sales promoters can use IPC tools in every village and household they visit as many times as they need, so there is no need for a large ongoing budget for media placement or professional events. IPC tools can be used by respected community volunteer promoters, community health workers, front-line field staff of NGOs, local government staff, and others already living or working in target communities. The key is that community sales promoters be trusted sources of information with energy and enthusiasm for conveying the messages. Community-based IPC is cost-effective, scalable and sustainable, as well as operationally compatible with CATS programming in terms of their village-level focus. Table 15 provides examples of IPC activities and tools for the three MBS communications objectives.

Adding mass media, direct consumer contact and generic advertising to support the IPC strategy

Once you have a clear sense of what your IPC strategy should look and feel like, you can consider supplementing and reinforcing its messages with other communications methods. Table 16 gives some examples of above-line-line mass media and DCC communications, as well as below-the-line generic product and business advertising, some of which might be added to support an effective and proven MBS community-based IPC strategy for demand activation.

Table 15: Examples of IPC activities and tools for MBS demand activation

Communications objective

Examples

1. Reinforce CATS messages to stop open defecation

- Creative visuals to reinforce faecal disgust, new social norms against OD, and pride in total sanitation during village-level IPC sessions⁴⁷
- Reminders of the community's commitment to staying ODF as part of any IPC on broader MBS, such as having a large poster of their ODF certificate prominently displayed at all times during all community IPC sessions

2. Motivate household investment in a durable hygienic toilet

- Steps and messages with creative visuals for conducting a community IPC session, or house visit
- Invitation flyer distributed before a community session to achieve high attendance
- Simple training tools for facilitators to make learning how to conduct community sessions and house visits easy
- Simple visuals for use by facilitators to introduce toilet design options, construction planning, and/or installation steps

3. Raise consumer awareness of new sanitation offerings and support sanitation businesses to promote and sell them

- Steps, actors, roles and materials for an initial community 'sales' event to introduce new toilet product system offerings, features, prices, how to purchase, and how to correctly install and use (e.g. product brochure, visual installation instructions; see *Annex 14*) and for follow-on sales ordering procedures⁴⁸
- Invitation to focal point businesses to a community event to introduce themselves, their toilet product systems and services
- Simple training tools for local facilitators to learn sales techniques, overcome objections, etc.
- Visual steps on how to order and pay for a new product system
- Simple tools for registering and tracking new orders, including an ordering receipt to reduce error for sales agents

Simple generic product marketing and instructional print materials for wide distribution to households in target communities are one form of below-the-line marketing which is critical for Objective 3, to raise customer awareness and support focal point sanitation businesses to promote and sell their new sanitation offerings (e.g. simple generic banners, business cards, product flyers, visual installation instructions, and product catalogues; see some examples in *Annex 14*).

Before moving forward with creative radio communications, such as those in <u>Table 16</u>, carefully examine the geographic coverage and language of potential radio channel(s) relative to the coverage of your network of active sanitation focal point businesses and languages spoken in

your target area to make sure they match up. If your market research shows only a small fraction of target households listen regularly to the same radio station, or that few households ever pass by and notice billboards and posters, or people wearing programme t-shirts are rarely seen, these channels will be ineffective.

DCC tools and activities may be combined with community-based IPC activities to achieve Objectives 2 and 3. Examples include showing a short video to provoke discussion at a community IPC session, or holding a toilet fair of new product system offerings at a market centre close to a group of target villages in conjunction with village IPC sessions before the event, followed by door-to-door sales visits right after the event. The 'Pan

⁴⁷ For an example, see the video of a village sales meeting and IPC in action in Cambodia, in Resources and further reading at the end of this section.

⁴⁸ Examples of sales ordering procedures from Indonesia's MBS programme can be found in WSP (2014), in Resources and further reading at the end of this section, and also Case Study 7 n 4.1 Programme implementation)

Table 16: Examples of mass media, DCC and below-the-line generic advertising activities and tools for supporting the IPC strategy

Communications objective

Examples

1. Reinforce CATS messages to stop open defecation

Mass media social marketing:

- Local community radio news feature on a village becoming ODF, interviews with an ODF community leader, CATS facilitator, etc.
- Inspirational video on becoming ODF targeted at local government/ community leaders (see Cambodia 'Inspirational Leader' video in Resources and further reading at the end of this section)
- Billboards in target areas, t-shirts, flyers, posters challenging citizens to stop open defecation, with creative, provocative visuals
- Catchy song for radio (and DCC), about virtues and social benefits of becoming ODF

2. Motivate household investment in a durable hygienic toilet

Mass media social marketing:

- Local community radio drama about personal disadvantages of OD or of unhygienic, temporary toilets, and benefits of investing in the new product system offering
- Billboards, t-shirts, posters, flyers highlighting the most salient message for investing in a durable hygienic toilet

DCC social marketing:

- Mobile video drama (as above) where radio has poor reach
- Traditional community-based competitions for best song to stimulate desire for and investment in the new product system offerings
- Mobile video to introduce the new product system offerings and options, installation and purchase steps at community events/meetings
- 3. Raise consumer awareness of the new product system offerings and support sanitation businesses to promote and sell them

Below-the-line product, business advertising:

- Generic banners, business cards, product flyers, product catalogues, visual installation instructions, specifically for focal point businesses to personalise, reproduce and distribute directly to target customers at community 'sale' events, home visits, and other direct sales activities
- Local radio public service announcements about availability of new product system offerings, where to get more information
- Local radio news features with local focal point businesses, satisfied customers of the new offerings

DCC consumer education and product marketing:

 Mobile toilet fair to display and educate consumers about the new product system offerings, how to operate, install, and maintain them, and introduce local focal point businesses and how to buy from them (see <u>Case study 6</u>: UNICEF India's 'Pan in the Van' experience)

in the Van' approach to raise consumer awareness of new toilet products in remote areas of Madhya Pradesh, India is an example of using DCC to lay the groundwork for follow-up community-based IPC activities (see Case study 6: UNICEF India's 'Pan in the Van' experience). When considering DCC, carefully evaluate who will pay for ongoing transport and event costs, and the cost implications of using DCC for replication, scale-up and sustainability of

your MBS programme communications activities. Whether or not to add other mass media channels or DCC activities to your IPC strategy will depend on their reach and impact among your target audience, and on your MBS communications budget for creative design, testing, and implementation. You should also consider the likely limited capacity and resources of your sanitation focal point business partners to contribute to



Case study 6

'Pan in the Van' – UNICEF India experience designing demand activation for remote communities

UNICEF Bhopal India Step 5: Demand Creation and Product Promotion

In 2006, 75 per cent of Madhya Pradesh State in India practiced open defection, with even more people lacking improved toilets. As one part of its sanitation support, UNICEF partnered with both the government at the Secretariat for Panchayat and Rural Development, and with the Energy Environment and Development Society (EEDS), an innovative market-oriented NGO based in Bhopal, to develop, design and pilot rural sanitation marketing. The programme targeted the most disadvantaged areas. The goal was to expand the supply chain of toilet components and designs to reach poor communities in remote rural areas, with toilet designs that appealed to consumers, and promote their uptake as part of efforts to eliminate open defecation.

From 2006 to 2008, UNICEF carried out market research, followed by product design and production development to improve designs and expand supply chains. The result was new methods that could be used to locally produce a range of better quality pre-fabricated toilet components, including pans. The production methods were easy and standardized, using moulds for quality control.

In 2009, UNICEF contracted EEDS to design and pilot a demand creation and marketing strategy in partnership with Panchayat (local government) leaders responsible for sanitation. The goal was to create awareness and promote uptake of the new toilet designs and production of components by local suppliers. To overcome a key challenge of the remoteness of target communities, EEDS and UNICEF developed an innovative marketing approach called 'Pan in the van' as part of its new WASH enterprise market facilitation and development approach.

'Pan' referred to the toilet component and supplies. The van was equipped with an audio video aid, a package of IEC tools and games, a plethora of technology options, exhibits, as well as a resource team for behaviour change. This included technical tools specifically focused on the capacity building of basic masonry skills for low-cost toilet construction. The van also carried IPC tools:

- Interactive games and CLTS-type triggering activities;
- Audio-video equipment and public address system as well as videos, folk songs, recording of key messages
- Physical samples of the new toilet products and components as well as full facilities;
- Equipment for producing sanitary items (pans, p-trap, etc.);
- Display items including a power generator, folding canopy, tables, boards, podium and meeting tent (for 15-20 persons);
- Trophies and certificates for participants.

The van travel to each Panchayat, the smallest administrative grouping of villages, in rural Madhya Pradesh comprising a population typically of about 30-500 households, for three days. In that time, EEDS facilitated information, education and communications activities to introduce households and masons to the new designs, components, and production methods to increase the uptake in the local market. Over the three days, EEDS raised community awareness and reviewed WASH-related issues identified in a participatory health hygiene analysis. EEDS also trained village level water and sanitation committees, women's self-help groups, and masons. School children were engaged through the school sanitation and hygiene mobilization, resulting in WASH action plans that included a community-led monitoring system. During the



three-day visit, all villages in the Panchayat were brought together at an all-day toilet that used a mix of inter-personal communications and direct consumer contact methods to educate and entertain people.

Critical to the success and strength of the mobile approach embodied by 'Pan in the Van' was to bring to physical examples of the new toilet designs and components to the people, where they live, to touch, feel, see, ask questions, and judge product quality and designs for themselves. UNICEF spent approximately US\$90,000 for the design and development of the 'Pan in the Van' approach. The operational cost of the four steps 'Pan in the Van' approach is estimated to be around 5-6 USD per household, excluding one-time fixed costs.

A review of the 'Pan in the Van' approach in 5 districts of Madhya Pradesh between 2009 and 2012 showed that the 'Pan in the Van' reached 120 villages and strengthened WASH-related services and capacity in an estimated 100 *Aganwadis* (preschool children development centres), 240 schools and 20,000 households. About 12,000 women and girls participated in the sanitation improvements in their community, while 100 *Anganwadi* workers, 700 schoolteachers and 35,000 school children to become agents of change in their communities. An estimated 600 masons were trained on different technology options, quality aspects and supply chain management for toilet construction in the remotest locations.

ongoing demand activation on their own (as well as responding to and fulfilling new orders generated by the demand created by these larger-scale communications channels) before utilising them. When adding channels to support the IPC strategy, their implementation will need to be carefully coordinated with the implementation of IPC activities of sales promoters and local government actors, as well as with focal point business development and strengthening activities, for maximum effect.

Building links with existing sanitation programmes and communications campaigns

MBS demand activation addresses communications objectives and activities, specifically to motivate household investment in improved toilets and to raise customer awareness of purchase opportunities, building on and reinforcing initiatives to stop open defecation. They are not a complete sanitation BCC approach, so you will want to make

Box 13: Tips for designing effective MBS communication messages and tools

- Use strong emotional appeal by engaging relevant drivers for basic sanitation (e.g. faecal disgust, comfort, convenience, nurture, selfesteem, dignity, social acceptance, personal/ community/national pride, privacy, etc.)
- Dare to be memorable and thought provoking
- Less is more. Narrow down messaging and focus on simple messages
- Use photos and experiences to convey messages, instead of text, cartoon, or verbal only
- Create tools that are easy, enjoyable and satisfying for front-line promoters to use with customers
- Develop materials that are low cost and easy to reproduce in quantity for all promoters and by focal point businesses on their own

sure MBS messages and activities complement the objectives of your broader sanitation and hygiene communications programme.

In the case of community-level sequencing of MBS and CATS activities, questions will inevitably arise about the timing of CATS triggering and MBS demand activation activities. When do you 'introduce' a new set of product system offerings, or a local small business – before, after, or perhaps even during a CATS triggering event? When should you introduce information about technical options and locally available product systems? Here there is less systematic evidence about what works, but experience points to a mix of workable models. 49 It is best not to be prescriptive, especially in the beginning. It makes sense to test different sequencing approaches in CATS communities to see what works best in your context.

Deciding who will carry out IPC demand activation activities in MBS programme communities

You will also need to decide which communitylevel actors and sustainable structures are available on the ground in each village to carry out IPC activities and support direct sales of new product systems for focal point businesses, including playing key intermediary roles of informing focal point businesses of households ready to order and purchase, and vice versa. Especially when working with smaller businesses, it is usually best if MBS front-line sales promoters are part of existing community-based structures. These might be a member of a local village council or women's group, a volunteer health worker, or other village or local government member. The key is that they be based in the community, and respected and trusted by households. Women are often overlooked for these kinds of roles, especially when monetary compensation might be involved. However, they should be actively recruited and trained, as women have proven to be effective and motivated community sales promoters, when given the opportunity (see Box 14).

⁴⁹ For example, see WSP (2014), which outlines standard operating procedures for a one-stop shop sanitation service in Indonesia. Or WSP's 2011 evaluation of long-term elimination of open defecation in Bangladesh, by S. Hanchett et al. Details of both can be found in Resources and further reading at the end of this section.

Table 17: Dos and don'ts for community-level sequencing of MBS and CATS

DO test what works for you – set up some small action research trials of demand activation before/after/during CATS triggering to see what might work best.

DO consider 'harmonising' approaches in a broad sense at national and sub-national scales. For maximum cost-effectiveness, it may not be necessary or ideal to try to geographically overlap completely.

DO monitor community dynamics closely, and adapt strategies as you go.

Are your demand activation strategies alienating/ stigmatising those with poor quality toilets? Is it clear that a local leader is preventing some businesses from freely operating? **DON'T** treat MBS as a supply-side add-on to CATS work. Businesses will fail to sustain and grow if they are limited to working only in CATS areas and only when a community is triggered or ODF.

DON'T try to control the market. Making blanket policies like 'no demand activation until a community is ODF' will stifle local businesses on the supply side. On the demand side, there is no evidence that customer awareness of private sector product/service options is detrimental to ODF achievement, and there is some evidence that it may be crucial to long-term sustained ODF.⁵⁰

DON'T take a 'one-size fits all' approach. While it might seem easier to just tack on demand activation activities to a community leader's role, this may not be ideal. Turning natural leaders into a sales force is not the goal of MBS, although this has worked well in some places.⁵¹



⁵⁰ See S. Hanchett et al.'s 2011 evaluation of long-term improved sanitation in Bangladesh for WSP (in Resources and further reading at the end of this section).

⁵¹ For example, see Case Study 7 (Indonesia) in 4.1 Implementation.

Box 14: Engaging women as sales agents in MBS

Some MBS programmes actively recruit and engage women sales agents or promoters, who then receive sales commissions or salaries, as a core programme strategy.

In Cambodia, disaggregated sales performance data collected by WaterSHED showed that male sales agents were outperforming female sales agents. Gender analysis found four main barriers for female sales agents which contributed to this: more limited social and professional networks, lack of confidence in their ability to communicate information about toilet options, time constraints, and mobility restrictions and risks. In response, WaterSHED developed several tailored initiatives, including the WEWork Collective, a sanitation business network run by women, for women, which could act as a strong new social and business network, allowing women to help each other to address the challenges they were facing compared to their male counterparts.

In Nepal, iDE recruits, trains and pays community sales agents – called 'community business facilitators' – to sell toilets across multiple villages, using group presentations and door-to-door visits. New recruits get sales training, and practice one-on-one selling to develop confidence, skills and effectiveness before leading group sales events. Nearly half of these facilitators are women, and they have been shown to be as successful as the men. Some of the most successful female

facilitators can earn commissions of around \$100 in an average month, providing a significant increase in their family's finances and generating pride from the sanitation work that they do. Aside from the different cultural context, the ongoing external investments by iDE in training, support, higher pay, and supervision of MBS sales agents may have contributed to the improved outcomes for women sales agents in Nepal as compared to Cambodia.

In rural Uganda, USAID's Sanitation for Health programme recruits and trains existing female community-based health promoters who already work as door-to-door health advisors and sell medicines in their community. They earn a commission selling toilet components directly to customers who want to upgrade their existing toilet. Female sales agents refer customers to a partner mason and follow-up to ensure correct installation, operation and usage. Early indications show rising sales and installations in Uganda, through a partnership which benefits both the female sales agents and male masons.

Sources:

'Community Business Facilitators achieve sales in Nepal'. iDE. Available at: https://www.ideglobal.org/key-project/community-business-facilitators-achieve-sales-in-nepal.
[Accessed 4 June 2019].

WaterSHED, 'Increasing and Improving Women's Participation in the Rural Market for WASH', slide presentation, WASH Futures meeting, Brisbane, 5 March 2018. Available at: http://54.189.118.162/wash-futures-conf-2018-womens-emp/. [Accessed 11 June 2019]

Because interpersonal communication about new product system offerings is so critical to a household's decision to invest in an improved toilet, direct sales and marketing to rural households is a fundamental component of MBS demand activation strategies. In many MBS programmes, community-based sales promoters receive a small sales commission or fee, paid by the focal point businesses for each new product system order.⁵² In other programmes, they are volunteers – while

some programmes have used professional sales agents. Table 18 next page outlines advantages and disadvantages for your programme to consider in deciding which kinds of actors and payment schemes to use as sales promoters to directly market and sell the new toilet product systems to rural households.

In CATS programme areas, questions will arise about whether or not to use CATS facilitators

Description

Advantages

Disadvantages

A business (often a concrete producer or other sanitation SME) offers a commission to a local agent for each toilet system sold

 Local sales agent is responsible for direct promotion, taking new orders, and sometimes arranging delivery/ construction dates and/or

payments

- Commissions typically range from US\$1-3.50 per toilet product
- Agents are often community health volunteers, sanitation workers, or identified CLTS natural leaders from the community

- Motivated to help their community and fulfil government mandates
- Understand the community and are trusted
- Have other main income source - commission is minor incentive
- Businesses take more ownership of local sales force
- Less need for government/ project involvement in sales co-ordination
- High sustainability
- Strengthens local relationships and coordination among local leaders, government staff and sanitation businesses

- Potential for conflict if agents also play roles in local government and/or CATS
- Can be difficult for small businesses to manage sales force independently – support still needed
- Focus may be on sales rather than installation and consistent usage – monitoring needed
- Limited geographic reach of each promoter, which may require larger number of promoters

Volunteer community-based sales promoters

Commissioned community-based

sales promoters

- A government department (sometimes with support from external agencies) enlists community influencers or leaders to support product promotions and sales
- Volunteers, often health volunteers, or sanitation committee members, take on direct promotion, taking new orders, and sometimes arranging delivery/ construction dates and/or payments with focal point businesses
- Highly compatible with CATS and other community-based approaches
- Volunteers motivated to help their communities
- Understand the community and are trusted
- Non-monetary motivations used instead – additional training, recognition, prestige, new tools, t-shirts, etc.
- Sanitation promotion may become lower priority compared to other work
- Less active selling if noncommissioned
- More need for active government/programme supervision and involvement in sales co-ordination

and natural leaders as commissioned sales promoters for local businesses. While using existing community-based CATS facilitators and natural leaders as sales promoters for IPC activities may be a good option in many contexts, and should not be ruled out, it is important to ensure that CATS facilitation is seen as separate from efforts to develop the market. Turning natural leaders into a sales force is not the goal of MBS; it is best to take an iterative approach to learn what works and build up programme knowledge. For example, if it is unclear what roles CATS facilitators should

play or when they should be involved in MBS activities in a given community, you could pilottest having them involved in different roles at MBS promotional events before, during, and after CATS triggering to see what works best. At a minimum, CATS facilitators can help encourage the installation and correct use of purchased toilet product systems, and natural leaders and other officials can be trained to provide advice on product options, and technical aspects of installation, construction and usage of new product system offerings.

Professional sales agents

Description

- Locally well-networked college graduates or dropouts, experienced sales agents, other community members recruited to be sales agents by MBS implementer, such as government or NGO
- Trained, supervised and paid by MBS implementer
- Commissions ranging from \$5-\$20 per toilet, plus base salary pay in some variants
- Cover multiple communities and zones assigned by MBS implementer
- MBS implementer may separately charge a small fee to focal point businesses per professional sale

Advantages

- Motivated by full or part-time employment
- Commission earnings are an important primary or supplemental source of income
- Often work full-time
- Able to rapidly deliver sales in new communities
- MBS implementer has greater control over projected sales target results

Disadvantages

- High turnover of sales agents
- Reduction in numbers of active sales agents if demand and commissions are low, requiring MBS implementer to increase compensation to retain them
- Tendency to only target early adopters ready and willing to purchase in a community, with little effort to persuade others
- 'Outsider' status and unfamiliarity of agents a handicap in some communities
- Limited penetration in each community
- Low sustainability, requires ongoing external budget to expand programme

Who pays for community-based demand activation?

When thinking about who will pay for demand activators/sales promoters at community level (initially, and as the programme scales up), it is helpful to consider and separate costs into four main item areas:

- 1. Upfront costs of designing and testing activities, operating procedures, and tools for sales promoters to engage target customers and activate households to purchase the new toilet product systems (the focus of 'demand activation' this section).
- 2. Costs for recruiting and training new sales promoters, including developing and testing training materials, initially and then later as the programme rolls out and scales up to new areas (see 4.1 Programme implementation).
- 3. Costs of paying sales commissions.
- 4. Costs for producing and reproducing product/ business local advertising materials ('below-theline'), such as flyers and catalogues for focal point businesses.

Generally, external funders (such as the government or a support agency with donor funding) pay for all of the first item – upfront design and development costs – and all of the initial costs of item two; the recruitment and training of demand activators. In many cases, they may also need to support recruitment and training as a programme scales up across new areas.

On items three and four, ideally, local focal point businesses should pay for sales commissions and for their own print marketing material reproduction (e.g. photocopying) by incorporating these in their toilet product pricing and cost structure. This would be the most sustainable approach - however, there are many cases where (timebound) external support for these last two items may be needed, in order to get the new sanitation market developed to the point when new toilet sales have taken-off.53 In MBS, focal point businesses are unlikely to generate enough profits from toilet sales to fund the full cost of demand activation and promotion, although they are often able and willing to pay small commissions to sales promoters for each new toilet customer.

⁵³ Experience of MBS programmes suggests new toilet product sales begin to expand rapidly after year 4 of an MBS programme. For more detail, see USAID (2018) in Resources and further reading at the end of this section.

Bigger businesses might be able to pay a small contribution of US\$0.02-0.05 per customer photocopy cost for a product instructional sheet, but even that has proven to be very difficult – so be prepared to budget for this until sales begin to take off.

Sometimes the level of sales commission that a local focal point business can afford covers only a portion of the sales promoter's effort/time/travel costs. In addition, the initial phases of demand activation may require more time, effort and costs for the first few customers in a new community. In these cases, additional incentives and temporary financial support for these demand activation costs may be needed, to motivate promoters and support local focal point businesses (ongoing and extra initial costs of demand activation once the programme is up and running is explored in more detail in 4.1 Programme implementation). Consider structuring external funding for demand activators in these cases, as payment for performance.⁵⁴ Making such performancerelated payments for demand activators requires considerations for geographic variability, in terms of population density and distances faced by different demand activators. They should also start at the lowest level acceptable to the activators, and you should have an exit plan from the start.

Planning your overall demand activation strategy

Effective IPC methods and a clear sales and marketing strategy form the backbone of successful MBS programmes. Without a proven community-based IPC demand activation strategy, and without front-line community sales promoters to directly engage individual households to invest and purchase the new product system offerings and link them to local focal point businesses, other forms of communication will have minimal impact. 'Traditional' or mass media communications can be costly and ineffective at activating target customers and are unsustainable. It therefore makes programmatic, operational and budgeting sense to prioritise the design and testing of IPC activities and tools with identified sales promoters, as well

as product marketing print materials for focal point businesses that they can afford to reproduce, as the core components of your MBS demand activation strategy for implementation.

A further reason for focusing on IPC and *local* marketing is the lead time needed to set-up or improve local supply chains for the new product system offerings. If the new product systems are not yet widely available to rural households, mass media and DCC marketing activities encouraging investment in the new offerings can result in households becoming interested, only to discover the new options do not yet exist in their community, thereby confusing and frustrating potential customers.

However, where market research and other evidence *does* indicate that mass media marketing (such as local radio) or DCC methods are likely to be cost-effective, and there is sufficient budget for creative design and testing as well as to sustain their use in scale-up, a two-stage design process is recommended. The first stage is creative design and testing of the core, community-based IPC demand activation activities and identification of persons to carry out those activities. This can be done at the same time as the design of your focal point business model and delivery approach, and associated market facilitation and business development support activities.

The design and testing of additional activities via mass media or DCC communications channels should always be a second phase, as an addition to IPC. For example, a strategic time to design and test such additional communication channel activities might be in the second year of implementation piloting, in the period leading up to and during the peak sales season, which often comes right after harvest season when rural households have extra cash. This will put you in a position to evaluate whether adding these communications channels in co-ordination with ongoing IPC activities enhances purchase and sales of the new product system offerings and should therefore be considered for inclusion in scale-up.

If you do decide that such additional channels may be useful to bolster your community-based IPC demand activation strategies during implementation or scale up, <u>Box 15</u> below outlines some further resources for developing and implementing a large-scale social marketing communications campaign.

In planning for additional DCC or local radio mass media to support IPC activities, it will be important during the initial IPC creative design stage to have an over-arching creative concept that can also be used to guide development of these complementary communications activities. A template to use to develop a demand activation communications creative brief can be found in *Annex 12*.

Developing the core MBS IPC demand activation activity tools and product marketing print materials

Follow the steps below to develop tools and materials for local actors to use for demand promotion and customer product marketing and sales to achieve the demand activation objectives relevant to your sanitation situation in the piloting stage of your MBS programme. These steps can be adapted to include DCC activities and local community radio communications to support your MBS community-based IPC strategy, where relevant and programmatically feasible.

Step 1: Assess the teams' skills

Carefully assess contractor staff skills and capacity, and capacity within UNICEF, for example of your WASH and communications for development (C4D) staff, to manage the IPC sales and marketing communications development work. If there are gaps, ensure the services of short-term expertise in below-the-line sales and marketing communications is engaged to support the team.

Step 2: Identify and develop a rough budget for the design and start-up phase

Develop an initial budget for developing activities and producing tools by answering the following questions. This does not need to be overly detailed to provide a framework for moving forward.

Box 15: Guidance and resources for developing large-scale sanitation social marketing communications campaigns to support IPC demand activation activities for MBS

- WSP's Introductory Guide to Sanitation
 Marketing and online toolkit has guidance on
 developing, budgeting, procuring, managing,
 and implementing large-scale social marketing
 campaigns, including formats and guidance for
 writing a creative brief for advertising firms, and
 practical tips for pre-testing creative materials.
 Available at: https://www.wsp.org/sites/wsp/files/publications/WSP-Introductory-Guide-Sanitation-Marketing.pdf.
- Hands-on Social Marketing is a manager's
 workbook by Nedra Weinreich published in
 2010, and contains step-by-step guides for
 designing a social marketing campaign from
 start to finish. See Resources and further
 reading at the end of this section for more
 details.
- The Fundamental Templates of Quality Ads by Jacob Goldenberg, published in 1999, 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. Available at: https://www.researchgate.net/publication/227442188 The Fundamental Templates of Quality Ads
- USAID's Hygiene Improvement Project published Sanitation Marketing for Managers in 2010. It includes useful guidance on rural communication channels and designing district-based rural social/commercial marketing tools, including for IPC and product promotion.
 Available at: http://hip.fhi360.org/file/27261/Sanitation%20Marketing%20for%20
 Managers%20-%20Guidance%20and%20
 Tools%20-%20July%202010.pdf

- How much is your printing budget for all IPC materials and an initial set of product marketing print materials for start-up?
- How much is your consultant/agency budget for third-party consultants or agencies, to help you design the tools, take photos, hire models, do illustrations, etc?
- How much is your training budget, for training front-line community promoters and others who will be using the new tools and doing the IPC activities?

OR

 If your budget is flexible, what is your total budget envelope for printing, consultants/ agencies, and training?

Step 3: Decide how much of the creative work to contract out vs. keep in-house

There are two main ways professional creative agencies, designers, trainers, or sales consultants can work with you: as partners (i.e. through partnership agreements) or service providers (i.e. through contracts). Partners work with you at a strategic level. They question your assumptions, provide strategic direction, and give you ideas to make your project as successful as possible. Partners should be capable of developing much of the creative content for IPC material and/ or training themselves after getting your input. Usually, partners are more expensive but can offer greater value when your team does not have enough expertise in behaviour change and marketing communications.

Table 19: Template for communication tool brief with potential answers

Question	Example answer
1. What tool do you want to create?	A generic advertising flyer with contact information for the local toilet business
2. Why is this tool important? What problem do you want it to solve?	Many community members do not know the toilet producer exists, their phone number, the cost of his/her toilet, or that they offer a delivery service
3. Who will be using the tool(s)?	Community health volunteers with limited literacy
4. Who is the target audience?	Rural villagers, mix of ages and genders, including household heads, with limited literacy
5. When will the tool be used?	The tool will be used at the end of a 1-hour IPC village session and during house visits
6. Where will it be used?	In rural villages in the province
7. What's the most important thing you want the participant(s) to remember or do after interacting with the tool?	That they can own a good toilet very quickly if they call their local business or contact the local sales agent
8. What are some potential reasons to believe this message?	There are now good toilets available for only \$35. The local business will deliver it to your door!
9. How long will the facilitator have to use the tool?	5 minutes
10. How many copies do you need to print?	10,000 pieces
11. How much budget to you have to print the required copies?	\$500 for all 10,000 pieces

By contrast, service providers execute whatever you tell them to do. For example, a graphic designer will ask you to provide all the copy (i.e. text and creative direction) and a trainer may ask you to provide all the training content. Usually service providers are less expensive and brought in later in the process. *Annex 13* provides an example of terms of reference for contracting a professional creative agency as a partner to develop the IPC strategy and materials, and *Annex 12* contains a template for a creative brief.

Step 4: Develop a set of working draft communication tool briefs

Whether you are considering a single one-hour community session to achieve one or more MBS demand activation objectives, a shorter

session or house visit on just one objective, or a flyer to advertise a product or business, tool briefs will be the foundation to help you develop them. A creative partner can work with you to complete your IPC tool briefs. If you hire a service provider, you will probably need to develop them yourselves. Table 19 previous page shows an example of a simple tool brief.

After developing an initial set of tool briefs (you may have anywhere from 2-20), decide with your team (creative partner included, if applicable) which tools are the most important, and balance this with what you can afford. Select the final briefs and engage your partner or service provider to produce the tools.

Box 16: Tips for managing the IPC design process

- **Tip 1**: Many agencies do not test prototype IPC materials with target audiences and sales promoters as part of their regular process. However, pre-testing is a critical step. Ask if the agency or supplier has experience doing audience testing in the relevant communities and how they plan to test their early designs. After these discussions, potential suppliers should be able to prepare their budget and work plan, which will allow you to make your final decision. If you have hired a partner, allow them to lead the process, but ensure you stay informed on progress and results.
- Tip 2: For an efficient IPC design process, designate one key contact person who can give final design approval. If multiple team members need to review designs, do it in one meeting all together with the supplier/partner, rather than by email or multiple individual review rounds. Request a work plan with key milestones and dates when your team's review/approval is needed. If working with a partner, allow some creative freedom for them to develop their ideas. Be open minded to new ideas that

- may challenge your assumptions. Testing first prototype designs is the best way to understand what works best with your target group.
- **Tip 3**: Creative concepts for IPC activities and tools can be adapted for other additional communications channels, as needed. For example, a storyboard that is then developed into a flip chart for IPC delivery in more remote areas could also be used to develop a local radio drama, where this has good reach.
- Tip 4: When developing local radio and/or DCC activities, co-ordinated implementation with ongoing community-based IPC activities in a given location will be an important dimension of planning and development. When contracting out the design and execution of these channel activities, ask for a detailed schedule and costing for coordinated implementation.
- Tip 5: Make sure promotional, sales and marketing tools, materials and activities developed for demand activation in the MBS programme are generic and do not have any logos of any organisations (or manufacturers) supporting the MBS programme.

⁵⁵ For more on audience testing guidance, see WSP's Sanitation Marketing Toolkit. Details in Resources and further reading at the end of this section.



Step 5: Manage the design process

Before hiring, review portfolios of past agency or consultancy work. Meet with shortlisted candidates (based on portfolio quality) and introduce the tool briefs you have developed. Ask them to walk you through the process they would use to turn the briefs into a final product and ask questions until you are comfortable.

Once your tools are designed and tested, and community sales promoters are trained (for details on when and how to manage training, see 4.1 Programme implementation), your MBS demand activation pilot programme is ready to launch. Be sure to include regular field supervision and frequent opportunities for feedback from front-line sales promoters during initial stages of implementation rollout, so that IPC activities and tools can be improved over time.

Resources and further reading

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Annexes

Annex 12: Template demand activation creative brief Annex 13: Example TOR for contracting a creative agency Annex 14: Example MBS communications materials

Case studies and country examples – sources and further information

Benin

WSP (2011). Experiences from Rural Benin: Sanitation Marketing at Scale. (Field note). http://www.wsp.org/sites/wsp.org/files/publications/wsp-benin-sanitation-marketing.pdf

Cambodia

Bill and Melinda Gates Foundation (2018). Case Studies in Gender Integration. Market-based solutions in Cambodia. Available at: http://watershedasia.org/wp-content/uploads/Gender-Case-Study-Market-Based-Sanitation-Solutions-Feb-2018.pdf

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Bhopal, India

EEDS (2011). Pan in the Van – An innovative on site approach for inclusive wash. Bhopal, India.

UNICEF India (2013). Bhopal sanitation marketing webinar.

Indonesia

WSP (2014). One-stop Shop Sanitation Service: From Social Map to Receiving Orders. (Standard operating procedure document, Indonesia). Available at: https://www.wsp.org/sites/wsp.org/files/publications/01_SOP-one-shop-sanitation-social-map-until-order.pdf

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Videos

WaterSHED Cambodia. Village Sales Meeting and IPC Tools in Action. Available at: http://www.watershedasia.org/selling-toilets-in-cambodia-watershed-style/

WaterSHED Cambodia. *Inspirational Leader*. Available at: http://watershedasia.org/inspirational-video-latrines-for-all-cambodia/

3.5 Reaching the poor through consumer financing

Overview

MBS programmes aim to make basic sanitation more affordable and simpler to purchase for the poor, through improvements in product system design and the delivery and business models of focal point sanitation businesses. But reducing market prices, increasing accessibility to sanitation products and services, and improving the predictability of the purchase process are often not enough: it is very likely that affordability barriers will remain for some households - especially for those in the lowest two wealth quintiles. This chapter examines affordability barriers for the poor and reviews consumer financing options, including subsidy mechanisms for addressing these barriers within an MBS programme. Other activities are also discussed which you can pursue nationally and locally to improve consumer financing for MBS. Specific methods and mechanisms to target social subsidies to reach their intended sub-groups are not addressed here.56

Consumer financing options

Table 20 next page outlines different market-compatible consumer financing options for sanitation. They should be considered once an MBS programme has had high purchase rates among those households able to pay in each community, to reduce affordability barriers further for the poorest households. They include new ways of providing social welfare subsidies, such as vouchers, conditional cash transfers (CCTs) pioneered in the health, education and welfare sectors, and consumer rebates – where a rebate subsidy is paid after a verified purchase has been made. Many of these options have been tried in short-term

pilots and show some promise (see the examples illustrated in <u>Boxes 17</u>, <u>18</u>, <u>19</u> and <u>20</u>). However, aside from sanitation microfinance loans in some Asian countries, most options have yet to be scaled up and sustained.

When thinking about these options, it is helpful to consider two possible dimensions of the sanitation affordability barrier that may be experienced by a household: cash flow problems (referred to as a liquidity barrier); and absolute cash poverty problems (a real inability to pay).

Borrowing and saving options in <u>Table 20</u> can work for households with a liquidity barrier; those that have the ability to pay for an improved toilet over time from their own sources of cash income. but struggle to accumulate the large up-front lump sum required to purchase all at once. Lack of liquidity is a significant barrier to improved toilet acquisition for rural customers in the three middle-income quintiles (the middle 60 per cent) across the globe, and options to address it will be important to develop in all MBS programmes. Box 17 provides some examples of successful sanitation loan programmes. However, encouraging customer-facing focal point businesses to offer credit – the option to pay in instalments – directly to households may be more effective in reaching more poor households with a liquidity barrier, as experience suggests these households often prefer instalment payment to taking a sanitation loan.57 During your market research, it will therefore be useful to identify local sanitation businesses who have a practice of offering credit to their customers, so you can approach and engage them during implementation of your MBS programme.

⁵⁶ You can find a review of these methods in UNICEF's Sanitation Marketing Learning Series Guidance Note 8: Equity in Sanitation Marketing. See Resources and further reading at the end of this section.

⁵⁷ example, see WSP-IFC (2013) and Pedi, D., et al (2014). Details in Resources and further reading at the end of this section.

Table 20: Market-compatible consumer financing options to increase access to sanitation

Category	Sanitation financing option	How it could work
	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
Saving up	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 toilet
Borrowing (loans/ credit)	Consumer loan via 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
o.ou.i,	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 re-sold or re-used (e.g. portable toilets)
	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)⁵⁷
Social subsidy to households	Conditional cash transfers (CCTs) for sanitation behaviour/ action	 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, or OBA)	 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

⁵⁸ See UNICEF's Social Protection Strategic Framework (details in Resources and further reading at the end of this section).
You can also contact the relevant UNICEF staff in your office, to explore opportunities for linkages with and learning from existing social protection programmes.

Social subsidy programmes are complex, require long-term funding commitments, and can be challenging to design and execute well. Engage UNICEF colleagues responsible for social policy or social protection programming to explore these options, and bring in external expertise where needed. The most important aspects of social subsidy delivery are related to strong systems for targeting, administration, fraud detection, and verification. Consider carefully the staging and phasing of any of the subsidy financing mechanism (vouchers, CCTs, or rebates). Starting too early, before new sanitation supply chains are established, can distort local markets and dampen demand among households that are able to pay. Evaluate the sources of long-term funding for subsidies at the outset, and assess the ability of local businesses to adequately supply new subsidydriven demand.

To address absolute cash poverty barriers, social welfare subsidies should be considered for the very poorest households. These are households who are either unable or would be unfairly burdened to pay the full costs of toilet construction or upgrading, even if spread over time for instance through a credit arrangement. These include vouchers, consumer rebates and conditional cash transfers (as outlined in Table 20 previous page).

Vouchers have been widely used globally to increase uptake of other health goods and services. For example, large-scale governmentfunded voucher programmes have been used successfully in several countries to encourage poor households or vulnerable groups to use antenatal and other health services, or to increase uptake of insecticide-treated bed nets. Voucher subsidy mechanisms have also been pilot-tested for sanitation and have been found to be effective. For example, see the Cambodia example in Box 18, where the MBS programme showed that targeted vouchers can be an effective way of increasing improved toilet coverage among the poorest. However, the experience reinforced the importance of delaying introduction of pro-poor targeted toilet subsidies in a community until coverage rates have risen and uptake is high among households that can afford to pay.



Box 17: Examples of successful loan programmes for sanitation

Lesotho: One of the first large-scale toilet construction loan programmes was in urban Lesotho in the 1980s. Government provided capital for a large loan fund, which was managed by a commercial bank. Loans for toilet construction were offered as part of a government-led sanitation promotion campaign, combined with development of private sector services. Loans were dispersed as a purchase order for a standard package of high-quality pit toilet and superstructure construction materials from certified businesses, who were paid directly by the bank.

Cambodia: WaterSHED Cambodia partnered with three MFIs to pilot-test the operational costs and impacts of offering toilet loans to rural households within their 'Hands-off' MBS programme.⁵⁹ Considerable up-front effort was necessary to identify a workable MFI partnership model and sanitation loan package and co-ordinate MBS toilet sales marketing and MFI lending activities. Initially, cash loans (US\$75-100 minimum) were offered by an MFI loan officer who attended the village toilet promotion and sales events along with the local sales agent. During trials, about 5 per cent of attendees (mainly new customers) applied for and received a toilet loan from the MFI. Many other interested households applied, but did not meet the MFI lending criteria. A more cost-effective model was later developed in which the MFI disburses an approved customer's toilet loan directly to the local toilet supplier business, who then delivers the customer's toilet. 60 The business pays a small fee (2 per cent of the toilet price) to the MFI, and the customer repays the MFI over time. An initial nine-month pilot resulted in over 1,200 loans via 29 participating toilet supplier businesses to new toilet customers. MFIs continue to offer sanitation loans in MBS programme areas across Cambodia.

However, most WaterSHED partner businesses in mature markets allow poorer households to pay in instalments, as a standard practice to maintain toilet sales because households expressed a preference for this, compared to a formal sanitation loan.⁶¹

Vietnam: From 2001-08, the Vietnam Women's Union operated a large-scale government revolving loan fund (RLF) programme, providing over 46,000 low-income households in three cities with toilet loans. 62 Hygienic toilet construction loans of around \$150 were offered, to be paid back at a subsidised interest rate in three instalments to poor households in areas without sewers. Loans had to be paid back within 24 months. The Vietnam Women's Union provided sanitation and hygiene promotion and technical guidance, screened qualified households, enforced repayment using a group-based saving guarantee model, and verified proper use of cash loans. The loan repayment rate was 99.6 per cent, and loan-funded toilet facilities were correctly operating five years later. The RLF capital was fully revolved about every two years, however, demand for the loans outstripped loan capital. The programme was scaled up via the Vietnam Bank for Social Policy across most of urban and rural Vietnam.

India: A variety of different Indian MFI and non-banking-finance companies have been documented across India⁶³ offering toilet loans, including a new organisation, Guardian, supported by Watercredit. org to exclusively offer water and sanitation household loans, in co-ordination with its parent WASH NGO Gramalaya.

⁵⁹ Geissler, K., et al. (2012) and (2016). See <u>Resources and further reading</u> at the end of this section.

⁶⁰ WaterSHED (2013). Details in Resources and further reading at the end of this section.

⁶¹ Pedi, D., et al. (2014). and WashPaLS (2019). Details for both in Resources and further reading at the end of this section.

⁶² WSP (2010). Details in Resources and further reading at the end of this section.

⁶³ Trémolet, S. and R. Kumar (2012). Details in Resources and further reading at the end of this section.

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Box 18: Voucher testing in Cambodia

NGOs iDE and WaterSHED both piloted the use of vouchers in Cambodia in 2015, to reduce the purchase price of materials for an off-set pour flush toilet for the poorest rural households. Both pilots used Cambodia's national 'IDPoor' social protection system to identify and target the poorest households under which the poorest 25-30 per cent of rural households are classified as either IDP1 (poorest) or IDP2 (less poor) and receive a card that provides eligibility for various social subsidies. Voucher amounts were similar in both pilots with discounting around 40 per cent for IDP1 and 20 per cent for IDP2. The modalities of the two pilots, however, were quite different. WaterSHED staff offered vouchers valid for one month to every IDPoor household without a toilet, in existing MBS programme villages that had achieved ≥80 per cent pour flush toilet coverage through market sales. In contrast, iDE sales agents offered vouchers in new MBS programme villages, irrespective of baseline coverage, during door-to-door sales visits only to IDPoor households who refused to purchase at full price, but then agreed to place an order when offered the discount as a follow-up.

In WaterSHED's pilot, 26 per cent of eligible IDPoor households purchased with the voucher. Those who

did not purchase said either that they could not afford to even with the discount, could not manage the labour to build, or faced other structural barriers. In iDE's pilot, 15 per cent of IDPoor households used the voucher, beyond the baseline full cost purchase rate of about 8 per cent for IDPoor households. In addition, iDE found some evidence that their vouchers suppressed purchase rates among non-IDPoor households, in villages with lower baseline coverage.

For more details on the voucher testing pilots in Cambodia see:

- iDE's Policy Brief, Leveraging targeted subsidies to increase sanitation coverage: evidence from a randomized control trial in Cambodia, available online at: https://s3.amazonaws.com/www.ideglobal.org/files/public/
 iDE-PB_KH_WASH_LearningsFrom-RCT.
 pdf?mtime=20190910230210
- WaterSHED's webpage Microfinance boosts latrine purchases in rural Cambodia, available online at http://www.watershedasia.org/ microfinance-boosts-latrines/

Consumer cash rebates require the household to pay for an improved toilet, service, or other sanitation improvement before receiving the rebate. They are typically an output-based subsidy structured as a one-time post-purchase payment. While this can be an effective way of incentivising toilet construction (see the Vietnam example in Box 19 next page), the pre-financing by the household is a condition that may limit the effectiveness of consumer cash rebates for the poorest. By contrast, conditional cash transfers (CCTs) consist of multiple and sometimes ongoing up-front payments, designed to incentivise behaviours by providing cash in advance and then verifying behavioural performance before issuing more cash.

For example, ongoing CCTs funded under social transfer programmes were first used in Mexico and elsewhere to encourage consistent school attendance over time. In Cambodia, they have been piloted to incentivise antenatal and post-natal health care among pregnant women⁶⁴ and were proposed to incentivise long-term toilet usage among very poor families with young children.⁶⁵ CCTs have also been successfully implemented for toilet building in a large-scale housing reconstruction programme in the Philippines (see Box 20). Consulting CCT experts and obtaining a thorough understanding of such CCT experiences in other sectors is important if you are considering using them in your MBS programme.

⁶⁴ USAID Cambodia's 'Nurture Project'.

⁶⁵ For an example proposal on CCTs, see *Growing up with a latrine*, in WSP, 2011. See <u>Resources and further reading</u> at the end of this section

Box 19: Household output-based aid rebate for sanitation in rural Vietnam

The NGO 'Thrive Networks' (formerly 'East Meets West Foundation') has been operating a scheme to offer rebates of about US\$20 to poor and vulnerable households who construct a household toilet that meets Vietnam government hygienic standards.66 The programme uses community-based targeting methods to identify qualified households, provides education and training on hygiene, sanitation and toilet construction. The NGO verifies poor-qualifying households that meet certain criteria, and signs a contract with interested eligible households who are given six to nine months to complete construction to qualify for the rebate. Local government plays an active role linking households with local sanitation businesses. Sanitation social loans are also available to top up the amount a household has to purchase a sanitation product or service. A final NGO visit to each participating household is made to verify complete construction, including shelter, and cash rebates are dispersed at a community ceremony event. Over 5,000 households benefited during the first two-year pilot, which has since scaled to 10 provinces of Vietnam.

Source: Nguyen, M.C., et al. (2014). Available at: http://thrivenetworks.org/wp-content/uploads/2017/03/ GPOBA 20140101 VN Output-Based-Aid-for-delivering-WASH.pdf



It is possible to draw some conclusions from previous experiences of using different financing options for a range of durable health-related goods, including sanitation. For household toilet construction, the most promising options for reaching the poorest households at scale would seem to be vouchers, cash transfers and, to a lesser degree, rebates. However, these all require sustained funding sources to pay for administration and independent verification systems, as well as the subsidy itself. Credit and loan options, via MFIs or other mechanisms, and instalment



payments offered by businesses have the potential for financial sustainability and can reach some degree of scale – depending on the MFI landscape, willingness of households to take on sanitation loans, and of businesses to take on household credit risk. However, these are unlikely to reach the poorest households who cannot (and should not be encouraged to) take on debt, and often do not qualify for a loan. Table 21 compares direct consumer financing options in more detail.

To date, the sanitation sector has limited and mostly small-scale pilot experience with the above alternative financing options, particularly in rural areas. This means it is essential that we engage practitioners with expertise in designing

Box 20: Conditional cash transfer (CCT) programmes for toilet construction in the Philippines

In the Philippines, the INGO Catholic Relief Services implemented a CCT subsidy programme targeted at poor households to rebuild or repair septic tank toilets and shelters destroyed by Typhoon Haiyan in 2013. The subsidy consisted of US\$211 in cash for rebuilding a toilet, or US\$143 to repair one – plus a toilet bowl and four corrugated roofing sheets. The subsidy was broken into two or three consecutive cash payments (depending on the category of assistance) and embedded in the shelter rebuilding/repair CCT process. Qualifying participating households were clustered by neighbourhood into self-selected groups, and the whole group was required to complete each stage of construction before members of the group were

eligible to receive the next payment. Households were screened and underwent orientation and training on acceptable models and construction techniques, prior to signing contracts. In a 20-month period, 20,000 shelters and 23,000 family toilets were rebuilt or repaired in 11 municipalities across a large geographic area. While there are risks with CCTs, staff proactively mitigated them by monitoring, and improving or changing aspects of programming; out of every US\$100 transferred in cash to beneficiaries, US\$97 was spent to build shelters and toilets. CCT beneficiaries expressed high satisfaction rates.⁶⁷

Source: CRS (2016). Available at: http://www.cashlearning.org/downloads/pintakasi-review-of-shelter-wash-post-disaster.pdf

and implementing these mechanisms in other development sectors – such as health, nutrition and education. Since this is an area for ongoing learning, it is best to carefully design and trial options on a small scale, before investing in large-scale programming.

Improving the consumer financing environment

As well as exploring options for best ways to increase access to sanitation financing for the poorest, it is important to consider the broader picture and what you may be able to do to develop the enabling environment for consumer financing.

Forming and leading a national task force on sanitation inequities and markets

It will be important to develop wider sanitation stakeholder co-operation and coalitions on MBS if the approach is to gain traction nationally. Bringing government and other senior sector stakeholders

together as a 'task force' could be particularly effective, specifically to explore new approaches for testing market-compatible, pro-poor subsidy financing options for sanitation. This would include, where appropriate, linkages with social protection programmes and policies, and could build on existing UNICEF advocacy to harmonise policies on household toilet subsidies and UNICEF's ongoing work with government in child and social protection. The task force could systematically explore how subsidy funding could be better utilised as propoor, market-compatible social subsidies and examine opportunities to integrate with existing social protection programmes and policies. It could review sanitation inequity in rural areas and identify characteristics of the poorest unserved households and the most disadvantages areas.

Seek the right partnerships to improve consumer financing for sanitation

Assess the financial services industry and MFI landscape in your country to understand existing players and the regulatory environment. Places

⁶⁷ See CRS (2016) in Resources and further reading at the end of this section. The report details the Philippines CCT programme's effectiveness, efficiency and appropriateness. It also includes a useful decision-making tool for when and how to use CCTs and strategies to minimise risks arising in household cash transfer construction programmes.

Option	Strengths/favourable conditions	Limitations/risks
Saving up	 Assures that households do not accumulate debt Established networks of savings groups can be a channel for sanitation product distribution and marketing in poorly served areas, but requires testing new business and sales models 	 Can be very slow if savings rate is slow and/or amounts are small Limited potential for scale if new groups must be created, savings rate is slow Savings for toilets compete with other cash needs May reach relatively better-off, who are able and have habit to save
Credit/ borrowing	 High compatibility with market delivery, can help expand access for lower income segments Potential for financial sustainability where loan promotion and administration costs can be covered by borrowing rates Requires favourable economic conditions and good financial sector regulatory policies Requires MFIs or other lending agencies willing to disburse and manage smaller 'social' loans No/low administrative & operational costs for instalment payment by local businesses 	 MFIs often uninterested in non-income generating, infrequent, small and 'higher risk' sanitation loans Reaches relatively better-off who can qualify for and pay back loan Risk of loans being used for non-sanitation purposes, difficult to track Up-front grant/donor investment needed to develop loan products and programmes tailored to demand for sanitation loans among each MFI's client service area Can overburden poorer households with excess debt or damage credit-worthiness Typically requires intensive operational coordination between MFI and MBS activities MFI brand and repayment risk if MFI actively distributes sanitation product and clients are dissatisfied For instalment payment, local businesses need sufficient liquidity or financing, and willingness to carry customer debt risk
Vouchers	 High compatibility with market delivery, potential for scale and market stimulation Flexibility to adjust voucher value to household needs and market fluctuations Allows consumer choice Can reduce inequity by targeting vouchers to qualified households Can leverage existing social subsidy schemes and need-based targeting mechanisms to reach poorest and vulnerable Potential to link to existing social protection programmes 	 High cost of initial set-up and overheads to manage and administer system (some cost savings possible on distribution side if linked to an existing social protection programme) Favours large-scale implementation, with significant and sustained funding Unable to fully eliminate inequity for peripheral and remote populations beyond the reach of certified businesses Risk of stock outages at redemption and retail outlets High risk of fraud in voucher distribution and at redemption points, but possible to detect and control fraud with active voucher tracking, monitoring systems Can suppress post-programme demand (i.e. once voucher scheme is phased out)

Option	Strengths/favourable conditions	Limitations/risks
CCTs	 Can leverage existing social subsidy schemes and need-based targeting mechanisms to reach poorest and most vulnerable Ongoing CCTs can incentivise poorer households to install and correctly use available products May work best where existing social subsidy frameworks and policies are maintained with long-term funding streams Opportunities to integrate with existing social protection programmes 	 Potential for fraud, misuse of cash when paid in advance or without high quality ongoing independent verification Complex and potentially costly to set-up, manage disbursement, properly target households (if not linking to an existing social protection programme) Household-level verification and monitoring of ongoing behaviour a major challenge Unable to eliminate sanitation inequity for peripheral and remote populations beyond the reach of sanitation supply chains
Rebates	 High compatibility with market delivery Works best at later stages of market development after majority have installed improved toilets May be appropriate where improved toilets are unusually expensive, e.g. difficult hydrogeology, high transport costs 	 Number of rebate-qualified households often exceeds availability of subsidy fund Rebates require pre-financing which can limit access for poorest As with vouchers, can suppress post-programme demand

Source: Adapted from Jenkins, M. (2012).

to start are the 'MIX Market' and national and regional microfinance associations, which publish detailed data on each MFI (see Resources and further reading at the end of this section). To find the right MFI partner, consider criteria such as: overall distribution and reach; current loan portfolio, including average loan size and types of products; experience with non-traditional lending (e.g. microinsurance, etc.); sources of finance; and their social mission.

Established MFIs, savings and loan organisations, and other groups with financial inclusion as their core business have a comparative advantage and extensive experience in workable models for consumer finance to poorer households. For this reason, you should be working directly with them as partners, rather than attempting to set up or administer these types of financing mechanisms

yourself as part of the MBS programme; you should always avoid the involvement of sanitation programme staff in consumer and business financial transactions to avoid conflict of interest, for example.

If partnering with MFIs, it is important to make a clear business case. Be prepared to work through the numbers and take time to understand and test some potential models. MFI engagement will require exposure to your MBS model and the sanitation product offering. Allow time for partnerships to develop, and avoid offering high levels of subsidised finance to start. Enduring partnerships are those where MFIs see a clear benefit for engaging in sanitation lending, as part of their core work.

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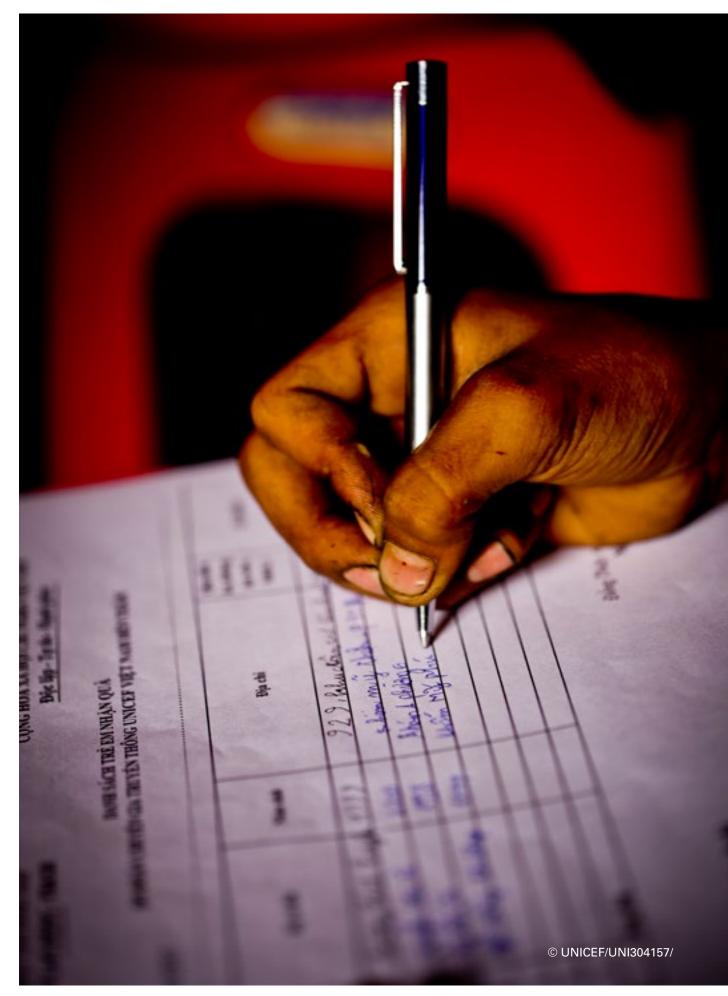
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4 Implementation

- **4.1** Programme implementation
- **4.2** Monitoring

4.1 Programme implementation

Quick reference

	Field operations for the progressive roll-out of your intervention
	 Engaging, incentivising and supporting businesses to deliver affordable, desirable toilet product systems offerings to target low-income consumers
What is involved?	 Executing key demand activation activities to end open defecation, motivate household investment, and educate consumers about new product system offerings
	 Training, capacity building mentoring and field co-ordination/supervision of different actors
	Developing new roles for market facilitators as the programme evolves
	 A successful large-scale programme pilot, followed by progressive evolution and expansion
What are we trying to achieve?	 Co-ordinated demand and supply-side strategies that result in increased uptake and usage of improved toilets among low-income target households
to acmeve?	 Expansion of sustainable private sector businesses and supply chains to reach these low-income target households
	Improvement in the efficiency of market interactions
How long will it take?	Ongoing, at least 2-3 years of initial programme implementation
now long will it take!	Monitoring happens at the same time
	 Field programme management, field supervision, co-ordination and monitoring staff
	Business and market development skills
What skills	Communications planning and implementation skills
and resources are required?	 Clear procedures and suite of accompanying tools and templates for co- ordinated programmatic activities
	 Training budget and materials (initial training modules, facilitation guides) for delivering required training and mentoring support to different actors
	Strong local government engagement and participation
UNICEF equity and	Consider ways to leverage and enhance women's roles in purchase decisions and to share the economic benefits of MBS activities, such as
gender reminders	toilet marketing and sales, production and retail, and business expansion
	Ensure inclusive representation on implementation teams, and in particular

Overview

Once you have completed the design phase of the MBS process, including the design and testing of new product system offerings, delivery approaches, business models, and demand activation activities to reach your target market, you are ready to bring these together into a large-scale MBS intervention in your target area. Remember, the design phase of the MBS process can take one year or more, but it is much better to spend the time upfront to get these early steps right at the start. At the end of the design phase, you will have a detailed workplan and refined budget and your outcome targets. This chapter looks at how to put these plans, budgets and targets into action – what to do during implementation of your MBS programme.

Take a flexible, but systematic approach

As you move into the implementation phase, it is recommended that you continue to take a systematic approach; focus first on demonstrating proof of concept, piloting at a scale that is large enough to demonstrate how a programme might be delivered with government resources alone. Then, focus on scaling this up to a larger geographical area:

- Large-scale pilot (12-18 months): You should first launch in an initial large-scale area with the most favourable conditions. This initial pilot area should be large enough to fully implement the co-ordinated package of MBS interventions at a scale with considerable market size. Depending on your context, this should be 200 or more villages in close proximity to each other and not too far from roads and market centres. Remember, working in ten or twenty villages is not enough. Although you are in 'demonstration' or 'pilot' mode, you need to be thinking and working at scale. Businesses will be encouraged to reach all communities they can profitably serve, whether or not they are in the target area.
- Progressive expansion (Year 2 and beyond):
 As your MBS programme matures, it will expand to new geographic areas. Successful

focal point businesses may further expand to new areas as they build their sanitation business line. At the same time, your implementation strategies will include encouraging more focal point businesses in other areas to take up the new product system offerings and replicate delivery approaches and business models to serve these areas. As the programme progressively expands, the network of suppliers, distributors and focal point businesses will grow and extend beyond rural centres of commerce and along roads to the more challenging areas.

Throughout the implementation phase, your programme must evolve, through trial and error, based on how the market responds to the initial intervention strategies. It is difficult to predict exactly how the market will respond to your package of MBS interventions, so use an adaptive management approach. Be ready to course correct if it becomes clear that something is not working.

Implementing a full-scale MBS programme requires programme managers and operational staff to have a 'facilitation' mindset. You cannot and should not control every aspect of the market, how quickly it develops or adapts. Customer purchase decisions will take time, as the new product packages are introduced. A wave of early adopters will likely be the first to decide to purchase, influencing others in their communities over time (this is called the 'diffusion of innovations'). Businesses will take time to learn how to respond to new demand, to evolve their business models and to strengthen their linkages within the supply chain. Be patient, and plan for modest sales initially, with exponential growth over time: MBS experience shows that sales acceleration starts in the third or fourth year of implementation.

This guide focuses on getting started with implementation, and specifically on the initial activities required to launch the large-scale demonstration, which is often the most difficult part. It involves recruitment, training and support to businesses, government officials and others. This intensive early support will be required less and less as the market matures. Later on, other activities will become more important; for example, addressing

emerging barriers within the upstream supply chain or higher-level policy and financing issues.⁶⁸

MBS implementation is all about good field coordination. At the launch of your large-scale pilot, you will bring together the tested demand- and supply-side activities for the first time so that consumers and businesses in the core sanitation market can link up in new ways. At the same time, you will support local actors – especially local government – to take on new market facilitation roles to address the essential features of the core market business environment.

You will need to bring each of these implementation components together into a cohesive, coordinated field operation, requiring the right level of operational guidance, supervision and staff support. These activities will evolve quickly as you learn about what is working and not working on the ground; keep this in mind at all times and take a flexible and adaptive approach.

Enterprise engagement and business development In the design phase, you identified the product system offerings, the delivery approach, and the best-fit type of focal point business to engage. As you move into large-scale pilot implementation, you should build on these, following an iterative process of market and business development – first working with 'first-mover' businesses, and then expanding as the programme evolves.

Working with 'first-mover' businesses

MBS gets businesses motivated to sell new products to household consumers that have historically shown little demand or interest in investing in sanitation purchases. At the beginning, some effort may be needed to recruit and engage the initial group of 'first-mover' focal point businesses to take a risk and make an investment on this (locally) unproven market. This allows you to illustrate what can be achieved, to generate interest and show incentives.

What to do:

- Identify and map all potential focal point businesses in the focus area: Building on your market research, you should geographically map all potential focal point businesses in your target area. Depending on the new product offerings and delivery approach, this could be masons, retailers, distributors, pre-cast concrete manufacturers, or others. Remember, the focal point business is the local customerfacing business that will be the primary contact for toilet purchase by the consumer – not every business in the supply chain. During this mapping, collect data on each business, including contact details, location (ideally with GPS co-ordinates) and existing products and services they offer. Develop a simple database and map with all relevant information. Depending on the size of your target area, it should take about a month or less to collect the basic data you need.
- Recruit focal point businesses by selling the **sanitation opportunity**: Arrange meetings with potential focal point businesses to discuss the sanitation opportunity. During these meetings, show the new product system offerings and present localised market research data: the number of potential new customers in their market area, how much money they will need to invest up-front on initial stock or equipment and rough estimates of potential profit per sale. 69 Explain what the MBS programme will provide to businesses, and clarify what the programme will not provide (see Box 21 below). An industry consultation is one way of engaging a large number of medium- and large-sized businesses at one time (an outline of how to carry out an industry consultation is at *Annex 6*). Following the industry consultation, you may choose to follow up with one-on-one meetings with larger businesses. A group meeting is suitable when working with small enterprises, such as masons.

⁶⁸ For a review of mature, large-scale MBS programmes, including some key lessons and best practices at later stages of sanitation market development, see USAID's 2018 Scaling MBS desk review. Details in Resources and further reading at the end of this section.

⁶⁹ Existing businesses will often need to be convinced of a 'low margin, high volume' business strategy, in which making less profit per toilet allows them to sell or build more toilets and thus increase overall profit.

Provide training and mentorship to a small number of high-potential 'first-mover' businesses: Potential businesses will select themselves by choosing to invest in the sanitation opportunity. Box 22 provides some key characteristics of high-potential first-mover businesses. Key elements of an MBS business training package are in Box 24 and tips for avoiding common business development pitfalls are provided in Table 22. It could take six to nine months to identify and support the first-mover focal point businesses.

During this time, the MBS field team will be learning and adapting enterprise engagement, training tools and tactics. Do not attempt to train all businesses at once. Focus on getting the first-movers up and running, and use that experience to refine your recruitment, training and exposure tactics. Training packages and curricula should evolve and develop, through actual experience with first-mover businesses. Do not finalise a training curriculum for large-scale use until you have spent time working with first-movers.

Box 21: Recruiting businesses by offering a commercial business proposition

Many businesses in the sanitation supply chain will have experience working on contract to programmes that offer subsidised toilets. At first, they may not understand the MBS concept. You will probably need to explain that the MBS programme is not looking for a contractor. You are offering services and support to help them tap the consumer market. They will need to sell sanitation products systems to individual households as they do for their other commercial business lines. You should come ready with specific, localised market data on the potential market size (i.e. the number of households or potential customers in their area) and details on the new product offerings, delivery approaches and business models.

Businesses will be asking, "what is in it for me?" – so be prepared to explain this clearly.

During meetings, discuss **benefits of partnering**with the programme, including:

- Programme-supported promotional campaigns and links to CATS/CLTS, to generate new demand
- Access to new product know-how, and technical and business training
- Opportunity to reach new villages through programme introductions and referrals
- Reputational benefits and networking opportunities with local government leaders (this can help expand their customer base for other products and services they offer)

Be prepared to **clarify what the programme does not provide**. Businesses may ask questions such as:

- Will partner businesses receive bulk orders or contracts for subsidised hardware?
- Will they will have 'monopoly status' in the new market?
- Will they receive seed capital?
- Does the programme promise or guarantee sales?
- Will partner businesses (including masons) receive direct payments from the programme?

The programme may want to set out some clear 'rules of engagement' for collaborating with businesses. For example, businesses might be required to meet minimum quality standards, or agree to some 'fair pricing' rules. These can be set out in a simple agreement or memorandum of understanding. If a business is not interested, thank them for their time and move on.

To streamline the recruitment process, consider the use of standardised templates and tools. For example, in several large-scale programmes across Asia, new recruitment meetings have a template to be customised with local market data, a standard meeting agenda, and a checklist for field staff with actions before, during and after the meetings.

Box 22: Characteristics of high-potential focal point businesses

Finding and convincing the 'right' focal point businesses – especially at the beginning – is one of the most challenging parts of sanitation business development. In 3.3 Delivery approach & business model design, favourable and challenging characteristics to consider when choosing a focal point business type were presented. You will already be considering these important characteristics as you begin one-on-one conversations with individual business. The following criteria can help you identify and encourage the businesses that are most likely to succeed:

- Existing businesses: Wherever possible, target existing businesses and avoid creating completely new sanitation businesses or retail outlets. Existing businesses are more likely to take the required commercial risk. They are more likely to have the staff, resources, networks, management skills and business acumen needed to succeed.
- Diversified product or service lines: It is unlikely that selling toilet products or services in rural areas will be a full-time 'stand-alone' business. Toilet sales can complement an overall business but they are very unlikely to sustain it. Ask businesses about what other products and services they sell and when (what time of year). Rural construction demand and toilet sales typically fluctuate seasonally and the annual revenue from toilets typically comprise between 5-20 per cent of an overall business.
- Willingness to make up-front investment:
 Successful businesses are willing to commit
 their own financial and non-financial resources.
 Present the results of your business model
 calculations on the specific costs involved in
 up-front investment and talk with businesses
 to understand whether these costs are
 barriers to programme involvement. Consider
 facilitating access to credit, providing product
 guarantees or leasing equipment rather than
 offering outright grants to individual businesses.
 Remember, a successful business will be
 prepared to take risks and get involved.

- Willingness to try new products and promotional techniques: Take the time to learn about other products or services the business has launched on their own. Why did they introduce this new product or service? How did they tell consumers about it? Experience with active promotions and willingness to launch new products is a good sign of entrepreneurship.
- Reasonable cash position and capacity to sustain and grow: Partner focal point businesses must have the capacity to deliver high quality products and services on time. They will need sufficient financial resources to start up and cash flow to continue operations. Ask businesses about their cash flow situation. Ask if they have taken a loan for their business in the past and what they used the loan for. Entrepreneurial businesses are usually willing to invest profit or take on debt to expand operations.
- Willingness to reach rural consumers with
 retail sales: Ask businesses about their client
 base and what percentage is from rural villages.
 Ask them to describe how they currently
 promote their products and services. If the
 business is accustomed to sanitation subsidy
 contracts, explain the long-term benefits of
 developing a new consumer market, rather
 than relying on short-term contracts (short
 term contracts associated with subsidies can
 be withdrawn at any time, while developing
 a new, enduring consumer market is more
 sustainable).

Box 23: Women as toilet suppliers and sales agents in Cambodia

WaterSHED's MBS programme in Cambodia promotes equal opportunities for women as leaders, customers, and market actors in the rural sanitation market, actively supporting and promoting women as owners/co-owners of toilet supplier businesses, and as toilet sales agents.

WaterSHED tracks and reviews sex-disaggregated data on toilet business performance, as part of identifying potential gender-based barriers to women's participation in the sanitation market. An initial assessment found that only 16 per cent of toilet supplier businesses were owned by women, but that many women were involved in supporting roles in toilet businesses owned by their husbands and fathers, for example through managing money, operations and helping with construction. WaterSHED conducted a more detailed gender analysis of toilet producer businesses in their programme, to identify gender barriers to greater business participation. The analysis found that gendered perceptions around physical construction

work and women's home and child-care responsibilities discouraged women from starting a toilet business. Women who did found it harder than men to acquire new customers, and harder to influence male employees and customers. Women sales agents also faced barriers due to their limited social and professional networks, lack of confidence in communication and sanitation information, time constraints, and mobility restrictions.

After the assessment, WaterSHED used their monitoring and research on gender to design and implement the 'WEWork' Collective, a new programme tailored specifically to support and engage women. The programme focuses on supporting women as they become active in the market, improving their performance, and ensuring they remain in the market for a sustained period of time.

Source: WaterSHED (2018). Case studies in gender integration: Market-based solutions in Cambodia. Available at: https://gatesgenderequalitytoolbox.org/wp-content/uploads/Gender-Case-Study-Market-Based-Sanitation-Solutions-May-2018.pdf



Expand the market and addressing evolving business needs

Once your MBS programme has supported first-mover businesses to profitably sell the new products and services, other businesses may want to enter the new market. MBS programmes can help scale up the number of sanitation businesses by spreading information about the sanitation business opportunity. The programme should encourage competition, providing equal access to information, market intelligence and training opportunities, so that any business can get involved. Businesses should be encouraged to innovate and compete with one another to capture new customers.

MBS market expansion activities include:

Organising peer-exchanges and exposure to existing partner businesses: During exposure visits to a successful business, the owners can share how they got involved in the programme, how many more toilets they can now produce and sell, their key challenges and future plans. A strong successful business profitably selling toilets is the best way to 'sell' the business opportunity. This tactic works best for smaller businesses. Care should be taken to arrange exposure tours with businesses that do not compete (for example, those separated by enough physical distance to not be perceived as a threat).

Providing opportunities for ongoing business exchange and networking: After the initial training or mentoring support, MBS programmes should bring programme partner businesses together periodically, so they can talk directly to each other about common technical and business management issues they face. Regular industry consultations could be a forum for this. Before convening, consider whether businesses are in direct competition with one another and how to manage consultations accordingly.

Providing opportunities for business-government networking: MBS brokers new relationships and builds trust between the private sector and local governments. Arrange forums that bring together businesses and government officials to talk about issues such as quality standards and government sanitation goals. Forums are opportunities to reward businesses with networking opportunities that can help them build their reputation. Do not offer to pay for business partners to attend. But remember, for a business 'time is money' so be strategic about where, when and how to ask for their participation.

Considering ways to formalise collaboration and encourage quality: Industry associations and local accreditation schemes have proven to be successful ways to scale the sanitation market, monitor quality and build consumer confidence in several Asian countries, including Indonesia and Vietnam. In Indonesia, for example, the APPSANI sanitation enterprise industry association provides sales aggregation, business credit, training, bulk purchase of inputs, and other benefits to its member network of SMEs.⁷⁰This required grant seed funding for the APPSANI secretariat. Formal accreditation and informal recognition can be strong incentives for partner businesses to offer good quality at fair prices.

Recruitment of new businesses will continue through the large-scale pilot period (and beyond), and existing businesses will require ongoing support. At any given time, there may be some businesses that are just beginning to partner with the MBS programme, and other trained partner businesses that are already confident with the new project offerings and business models you have introduced, but who may need support and advice on next steps.

Table 22: Common business development pitfalls and how to avoid them

Common pitfall

Assuming all businesses will have equal success.

Many sanitation programmes working with SMEs expect that these businesses will respond to the opportunity in a uniform way. A 'project-based' approach can lead to the assumption that each and every SME you work with will be willing and able to successfully engage in sanitation as a business. In fact, SMEs often struggle to succeed. Even in the U.S., over 50% of SMEs will fail within the first five years of operation. Some businesses will be very strong, while others may move on to new activities if sanitation does not prove to be profitable for them.

Attempting to control businesses.

The current market for sanitation is dominated by small businesses that often lack capital and management skills, and that typically have limited geographical reach. When working with SMEs, it can be tempting for an MBS programme to try to control these smaller players, for example, by attempting to set prices or telling them where they can and cannot operate. In Malawi, one programme prescribed which villages mason could operate in, designating their sales catchment area for them. This removed the masons' incentive to expand and seek out new markets, and demotivated them. Ultimately, most masons decided not to proceed with their sanitation businesses.⁷¹

Forgetting to consider the wider supply chain.

Sanitation programmes often focus on local (micro) businesses such as masons, without fully considering how these businesses link to the rest of the supply chain. It may be tempting to try to 'cut out the middleman'.

However, reducing the number of actors may not necessarily address affordability or accessibility barriers for households.

How to avoid it

Recognise failure as an option.

- Don't focus on inputs. Don't measure your success by the number of businesses you train or support, but rather the number and type of consumers they serve.
- Accept some failure. If a business offers poor quality or cannot sustain itself, be prepared to let it fail or move on to other activities. Do not artificially prop up poor performers. The market will pick the winners.
- Be prepared for uneven response. If you are working with SMEs, it is very likely that there will be a small number of very high performers. Most businesses will likely sell at moderate to low levels compared to these market leaders.

Take a hands-off approach.

- Let prices fluctuate. Final prices are a function of many factors, including the costs of inputs, which will change over time. Let the market determine the price.
- **Persuade, don't force.** A multi-country World Bank study found that businesses' sanitation margins ranged from 15% to 40%, but that low volumes of sanitation sales led to modest profits. Thelp sanitation businesses to understand the benefits of a 'low margin, high volume' business model. They must be convinced that they can attract more customers by taking slightly less margin.
- Encourage expansion into new markets. Do not restrict or delineate a business's sales area – let them go wherever they are willing and able to go to find new customers.

Understand the entire supply chain.

- Understand the costs and their drivers. Understand
 margins for inputs, transport and other costs. Transport
 contributes an estimated 10% to 20% of input prices
 from wholesale to local businesses. Good supply chain
 research as part of your market research will help you to
 understand where the key barriers and bottlenecks are.
- Plan for an exit. Consider what impact your supply chain interventions will have on the sustainability of the market. For example, if you decide to transport materials using programme funds or vehicles as a way to lower prices, this may work for the duration of the programme. But when the transport subsidy is removed, the prices will rise again to cover these costs or the supply may dry up completely. This may demotivate households and result in businesses unable to sell after the programme finishes.

⁷¹ Water for People (no date). See Resources and further reading at the end of this section.

⁷² WSP/IFC (2013). See Resources and further reading at the end of this section.

Common pitfall

Setting up entirely new sanitation businesses.

In the past, sanitation programmes have set up new retail businesses or demonstration sites, known as rural sanitary marts (RSMs), SaniCentres, or SaniMarts. In MBS, the 'market' refers to the exchange between buyers and sellers, not the creation of a physical 'market' place. RSMs and SaniCentres often fail as a supply chain strategy because they take a project-based 'hardware' approach that focuses on setting up or constructing new markets or shops, without considering the essential 'software' - the market development activities that link supply and demand. Even if these physical locations result in household toilet uptake, spending programme funds on building or buying physical sites is rarely cost-effective, and can result in poorly maintained or abandoned infrastructure when the programme activities cease.

How to avoid it

Target high-potential, existing businesses.

- Encourage a diversified product line. On-site sanitation facilities are durables that are not purchased repeatedly. Businesses set up to sell only sanitation products and services are not likely to survive. In Bangladesh, businesses that were artificially created to sell only sanitation were less viable than those that also included other products and services.⁷³
- Look for strong businesses. Existing businesses
 that are willing to invest, willing to try new products
 and techniques and that are in a reasonable cash
 position can often offer the best value to consumers.
 In India, for example, externally-created RSMs became
 ineffective because households preferred private
 market providers.⁷⁴
- Avoid building physical sites. There are numerous ways to demonstrate new products that do not involve costly infrastructure. In Cambodia, enterprises pay for product displays at local health centres. Brochures, banners and other communications can build consumer awareness. 'Pop-up' sales events in villages or on market days can bring the products to the households, rather than relying on households to come and visit a demonstration site.

Distorting incentives.

While finance will likely pose a real constraint to SMEs you partner with, your MBS programme will need to take great care when determining how to address this issue, especially in start-up implementation. At the beginning of implementation, it can be very difficult to understand the financing needs and barriers. Later on, in more mature markets, this becomes much clearer. Offering large amounts of seed money, 'revolving loan' funds or subsidised inputs can distort incentives and send the wrong market signals. If seed money is too high, businesses may enter the market for the wrong reasons. In Malawi, an NGO MBS programme supplied masons with seed capital in the form of cement and re-bar, as a one-time start up. The project assumed that the business would then be able to re-invest (revolve) the revenue into purchasing more cement on their own. However, the local community was aware that masons received these materials for free, and were therefore unwilling to then pay market prices for the slab.75

Make sure businesses are invested in success.

- Consider non-grant alternatives to reduce market barriers. Rather than grants of money or materials, consider other financing options such as loans, guarantees, and equipment lease arrangements. These options can help reduce risks and financing constraints for SMEs, but still guarantee their commitment and investment.
- Do not budget uniform per-enterprise seed funding:
 Many programmes make the mistake of allocating large amounts of seed funding for each business at the outset. Once it is a budget line item, programmes will feel pressure to disburse these funds. In Pakistan, UNICEF re-allocated seed funding when it became apparent it was distorting the market. Instead, they linked businesses that needed funding with local microfinance institutions.

⁷³ Hanchett, S., et al. (2011). See <u>Resources and further reading</u> at the end of this section.

⁷⁴ Kumar, R., et al. (2011). See Resources and further reading at the end of this section.

⁷⁵ Water for People (no date). See Resources and further reading at the end of this section

As you manage the enterprise engagement and business development process, here are some key operational tasks you will need to do:

Task 1: Budgeting and planning for enterprise engagement and business development

In developing your implementation budget, consider key line items such as:

- Target area focal point business mapping
- First-mover and ongoing recruitment of focal point businesses (e.g. meetings and events)
- Business mentoring and training curriculum development and delivery
- Business exposure events and networking
- Support for accreditation, association and other business collaboration

Allow for at least six months for recruitment and support for 'first-mover' businesses before moving into the second stage of broader exposure and large-scale training activities.

Task 2: Recruiting operational staff with the right business development skills

Ensure that you have adequate skills in small business development within the field operations team. You will want at least one business development specialist on the team to engage businesses, deliver business training packages (see **Box 25**) and refine supply-side activities as the market develops. These key staff should have at least some private sector experience, ideally in the local rural business context in your country. It may be necessary for traditional WASH partner agencies to draw on small business development experience from other sectors (for example, agricultural market development and financial services). If you and your partners do not have the required skills, consider outsourcing business training to external business development service providers or consultants that specialise in these areas.

Task 3: Right-sizing the business engagement and training approach

Training design should begin with a clear identification of training needs and learning preferences. Consider hands-on business mentoring and on-the-job training conducted at the place of business, rather than 'one-off' classroom-based training. Small businesses usually prefer practical and skills-based training. Ensure that implementing partners do not focus too heavily on theory and consider literacy levels of business owners. Training for MBS focal point businesses should cover some key elements (see Box 24) and have clear and measurable competency-based outcomes.

Task 4: Monitoring business-level indicators

Prior to the implementation launch, you should develop and track indicators that measure key sanitation business metrics over time (see 4.2 Monitoring). This includes regular updates on the total number of businesses engaged in the programme, their geographic scope and growth in toilet-related sales, as well as data on enterprise viability and profitability. This type of monitoring data shows how businesses are responding to the new sanitation opportunity, whether they are likely to continue their business and expand, and whether any programme changes are needed.

Activating demand

To support a functioning market, you will need to put your demand activation into action (see 3.4 Demand activation for guidance on the design of your demand activation strategy). Much of the groundwork for implementing your demand activation strategy will have been laid in the design phase. When you move into implementation, you will be putting your plans into action. You will now need to co-ordinate the execution of your demand activation activities with your enterprise engagement and business development activities outlined above. Below are the key tasks involved in implementing your demand activation strategy.

Box 24: Common elements of an MBS focal point business training programme

MBS business training packages should be tailored to local business needs, but typically include the following:

- General product system and service
 information: Businesses should understand
 the benefits of good sanitation and hygiene.
 They should be able to explain key technical
 features and functions of the product system
 packages they offer and advise on product use
 and maintenance.
- Technical production and installation of new products and services: Businesses will need technical training on production and installation techniques; curing times (for concrete); handling and transporting components; and maintenance services.
- Delivery approach: Business will need training on the new delivery approaches, including the (re-)organising of key business partnerships; the specifics related to transport, installation

- and payment services; and how the delivery approach links to demand activation activities.
- Business management and finances: Most small businesses in rural areas have very limited business management skills. Areas to focus on include basic business and sales planning, inventory and stock control, record-keeping, calculating a balance sheet and managing cash flow.
- Sales promotions: Very few rural businesses actively promote their products and services.
 Support may be needed to develop basic sales, marketing, and customer service skills, use sales tools such as brochures and banners, and make a simple sales and marketing plan.
 Businesses will need to understand how they can benefit from broader demand activation activities, and how to engage and manage commissioned sales agents and other frontline promoters.

Task 1: Budgeting and planning for demand activation

By the end of the design phase, you will have a detailed implementation plan, budget, and outcome targets. You will consider core IPC activities, actors and community-based structures required to motivate household investment. Especially at implementation start-up, demand activation will likely be a major cost centre within your overall implementation budget. Your budget and plan will need to consider:

- Overall input targets in terms of numbers of communities and households to be exposed to communications activities and messages, and number and type of community sales promoters to implement the IPC activities.
- Detailed schedules and locations for different types of community-based IPC activities and other events, including logistical arrangements and budget for transport and other execution costs such as supervision.
- Detailed plan and schedule for training front-line

- community sales promoters, co-ordinated with enterprise engagement activities.
- Production of all materials and tools, including hiring and supervising relevant suppliers and vendors.
- Placement of any mass media, if utilised. This might include the schedules and stations for radio airings, and the purchase and placement of billboards and other signage.
- Cost-sharing among different tiers of government or among different partners for communications execution. If local government has control of sector budgets, this can include requiring minimum contributions to dedicated personnel for facilitation, as well as budget for IPC promotions, training, material production, media placement and others.

Task 2: Developing local capacity for demand activation

As the programme begins implementation, you will need to engage with local authorities to ensure that there is proper understanding and support

for all key sanitation promotion and demand activation activities in the target area. This includes holding local 'kick-off' meetings with sub-national authorities (e.g. district, sub-district) in order to:

- Introduce the final communications concepts and tools:
- Ensure that communications activities are integrated into local sanitation promotion strategies and plans;
- Obtain support and approval for all key activities; and
- Begin to define roles for different actors (see Table 23).

Local capacity development and advocacy strategies will need to consider how the new communications activities will engage local leaders and community-based health and other staff and partners. They will need to link closely with CATS activities. This may include developing mechanisms to inform businesses about which communities have been triggered so they can prioritise them in sales plans. It may also include developing clear roles of CATS facilitators in the sales promotion process (see Case Study 7 from Indonesia). If a 'toolkit' or menu of communications tools and options has been developed, local government will need to make decisions about what tools and activities they want to use, and how much budget is available for local execution.

Box 25: Implementation tips for integrating MBS and CATS/CLTS interventions

Throughout the implementation of your programme, you will need to consider how MBS activities complement CATS/CLTS and other rural sanitation interventions. Based on successful implementation experiences, some key activities for local government and other partners to link MBS and CATS/CLTS include:

- Helping focal point businesses to identify and conduct product promotions in triggered and ODF villages: Sanitation businesses can be given a list of triggered and ODF villages, so that they know where and when to go to a village.
- Creating opportunities for communities to take advantage of bulk purchase: One of the key supply-side barriers for poor communities is transport. Organised community bulk purchase may help households share costs. CATS action plan implementation may be the best time to capitalise on this opportunity.
- Using CATS follow-up to encourage immediate installation and use of purchased products: Where CATS programmes are active, CATS facilitators can help encourage the installation and correct and consistent use of purchased products. Natural leaders and other officials can provide additional advice on product options,

- technical aspects of installation, construction and usage of improved toilets.
- Incorporating business tracking and support for 'healthy competition' between businesses into ongoing activities: Sub-national authorities can consider non-monetary rewards and incentives for focal point and related sanitation businesses, including recognition of 'high performing' partner businesses and local market development innovations that help to expand rural access to basic sanitation. In Cambodia, district and commune officials include basic sanitation coverage, sales, and business performance in monthly meetings that track ODF status. High-performing businesses are brought to a national forum to celebrate their success. In this framework, businesses selling quality affordable products in previously unserved communities are seen as key partners that can support achievement of ODF status and sustain ODF status over time.
- Incorporating new product sales and installation monitoring into existing CATS monitoring and verification frameworks: CATS follow-up and verification systems can be expanded to include regular monitoring of new product purchases and installations, which can be cross-checked with sales records of businesses.



Task 3: Training front-line demand activators, and links to businesses

During local-level engagement, the programme will also work to identify and train local front-line sales demand activators to carry out IPC activities and product marketing and sales promotion in each community. Whether sales promoters are commissioned or volunteer, they will need to be trained to use each of the communications and product marketing tools. This should include field practice in communities to gain confidence with the new communications techniques and tactics. It should also include practice using any new monitoring tools, such as sales order forms or receipts. Front-line promoters will also need to have clear processes and steps for linking customers ready to purchase to the focal point businesses they will work with to generate sales. In general, front-line promoters may need three or four days of initial hands-on training, followed by periodic supervisory monitoring, and refresher training.

Task 4: Monitoring demand activation activities

By the end of the design phase, and prior to the implementation launch, you will develop a plan to

track indicators that measure household exposure and response to key product demand activation and sales marketing messages and activities. This type of monitoring data shows how households are responding to the new sanitation demand activation and sales activities, and whether any programme changes are needed (see **4.2 Monitoring**).

Strengthening the business environment

MBS brokers new collaborative relationships between the private sector and local governments, helping to build trust and enabling businesses to serve households that have been traditionally left out of the market. In practice, who takes on what roles in MBS implementation will be highly dependent on the policy and institutional environment as well as the local capacities, interest and political will of government officials and other partners within your target area.

Table 23 highlights typical sanitation market facilitation roles and activities for government and other actors at different levels. As you begin implementation, you will need to define what roles and activities make the most sense for the different actors in your local context.

Table 23: Common MBS market facilitation roles at national, sub-national, and local levels

Actor	Key roles	Indicative functions and activities
National (lead ministry)	 Policy and strategy development Regulation Co-ordination Capacity development Knowledge management 	 Set sanitation goals and establish priorities Articulate the role of the private sector and markets in national sanitation policies and strategies Co-ordinate engagement of different actors in MBS Develop policies and guidelines on 'smarter' use of sanitation subsidies, including social subsidies, to reach poorer households Play an active role in designing demand promotion campaigns Ensure quality standards for sanitation products and services, including regulation and oversight of the private sector Set job duties for sub-national and local officials, and provide training and support to line agencies Allocate budgets to sub-national and local government for demand creation and promotional efforts Advocate and engage with the private sector and sanitation business associations Co-ordinate national-level knowledge exchange on sanitation marketing and linkages to CATS/CLTS
Sub-national actors (e.g. regional government, NGOs)	 Supervision Monitoring Capacity development Consumer protection 	 Supervise and ensure co-ordination between CATS/CLTS and MBS interventions Facilitate and attend forums with sanitation businesses and support the formation of business associations Monitor sanitation businesses to ensure compliance with quality standards, regulations, and fair pricing rules Monitor changes in basic sanitation coverage and other sanitation improvements Offer technical support to consumers on installation and safe and correct usage Provide equal access to information and equal opportunity for businesses to promote their products Set job duties for local level officials and provide training and support Provide consumer protection against predatory businesses Allocate budget to demand creation and promotions Contribute to research and knowledge exchange on sanitation marketing and its links to CATS/CLTS

Actor	Key roles	Indicative functions and activities
Community- level actors (e.g. local	Demand promotionLinking new demand with local supplyMonitoring	 Help arrange village-level sanitation promotion and product demand activation activities, including introductions to new products and businesses
government, community health workers,		 Play intermediary role, informing businesses of households who are interested to purchase, and informing interested households of contact details for local businesses
community		 Inform local businesses of CATS-triggered communities
leaders, CBOs)		 Help broker and arrange bulk community purchases
		 Provide equal access to information on potential size of local demand and equal opportunity for local businesses to promote their products
		 Monitor basic sanitation coverage and new toilet installations
External resource	 Support MBS design phase 	 Help conduct design phase activities, in particular market research and product systems design and testing
agencies (e.g. consultants,	Capacity development & training	 Design and deliver training and business development services
private firms, NGOs, training	training	 Facilitate business forums and exchanges
institutions)		 Support local government in sanitation promotion and demand activation, field-level supervision and linkages to CATS/CLTS activities
		Co-ordinate village-level demand activation events if needed
		 Monitor toilet sales (of partner businesses and sales promoters), new installations, coverage, usage, equity and other MBS programme metrics⁷⁷
UNICEF	Co-ordinationCapacity	 Co-ordinate, fund and commission key preparation, design and implementation activities
	development • Policy advocacy	 Policy advocacy for market-based approaches, smarter subsidies, and social policies for sanitation
	Knowledge management	 Capacity development and support for government at all levels (and other partners if needed) to implement MBS activities
		 Knowledge management, research and exchange on key MBS, CATS and financing issues
		 Monitor results and equity outcomes

Co-ordinating market development activities on the ground

In many ways, the most difficult task of MBS implementation is bringing all the key operational components of a large-scale MBS programme together in communities at the same time. Because supply- and demand-side efforts require different activities and skill-sets, and because a large number

of diverse actors are involved, implementation of MBS interventions require exceptionally strong planning and execution of field operations.

To date, there have been two basic implementation models for MBS. In the first model, a lead government agency directly manages implementation, with technical support from agencies such as WSP and UNICEF, NGOs, experts,

Box 26: 'Civic Champions' – Local government leadership development for rural sanitation in Cambodia

The NGO WaterSHED engaged sub-national and local government in Cambodia as active partners in their rural MBS programme from the start. WaterSHED believes that local government must play a critical role in MBS by driving sanitation demand and behaviour change at community level to ensure the new sanitation market thrives. During their MBS pilot in Kampong Speu Province, the WaterSHED team discovered the positive power that a single local government champion could have on the uptake of toilets in their community, and the viability of their small business partners supplying that local market.

These early observations helped them develop and pilot a programme called the Civic Champions Leadership Development programme, targeted at changing the behaviour of elected local government officials at commune level (the lowest level of decentralised government in Cambodia). The programme hopes to foster the emergence of transformational leaders by developing the leadership skills, self-confidence, passion and experience of commune councillors to execute development mandates within their jurisdiction, using sanitation as the development practice vehicle.

In contrast to typical capacity building for the sanitation sector, the Civic Champions programme does not include any technical sanitation or policy training, and participants must apply and pay to participate. It consists of a series of four leadership 'Discovery' conferences, built around

peer-to-peer learning, each separated by three months. Participants are challenged (and mentored) to 'Develop' and apply new skills to achieve a development target with their communities at the first conference. At the next conference, they 'Deliver' their results, share their experiences, and 'Discover' new lessons, skills, and behaviours to 'Develop' during the next cycle. The leadership programme lasts 10-12 months. Competitive, peer-determined awards combined with highlevel government recognition serve as powerful incentives for participants to excel.

Since the successful pilot test in 2013, Civic Champions has scaled to every district in all eight provinces in which WaterSHED works. It has been critical in reversing declining toilet sales in established sanitation markets across WaterSHED intervention areas, both during and after the programme period, and has accelerated gains towards total basic sanitation in intervention communes. The Ministry of Interior has become a partner, viewing the Civic Champions programme as one of the most effective capacity building approaches to support the Government's decentralisation and de-concentration reform which puts responsibility for development execution at the commune level.

More details about the programme can be found at: http://watershedasia.org/civic-champions/

Source: McLennan, et al. (2014). Available at: http://watershedasia.org/wp-content/uploads/WEDC-2014-MCLENNAN-L.pdf

private marketing firms and others. In this model, governments are directly responsible for developing and executing workplans, participating in research, setting goals, providing training, monitoring, and regulating service provision. MBS programmes in Benin, Indonesia, Tanzania, India and elsewhere have been executed at scale with respective governments in the lead implementation role.

In the second model, NGOs or other external support agencies act as the lead implementing organisation. In this project-based approach, the lead organisation manages and executes key roles such as: contracting experts, marketing firms and business development service providers; coordinating consumer research and product design; providing training; supervising and co-ordinating field-level execution; and monitoring progress.

Box 27: Example implementation guidance from selected countries

A range of large-scale MBS programmes have developed detailed guidance and training packages for enterprise engagement and business development. These include:

- Indonesia: The Government of Indonesia's MBS programme has developed a detailed Sanitation
 Entrepreneur Training manual with accompanying training modules, as well as standard operating procedures for each step of the implementation process, including the business process, business planning, social mapping, receiving orders, construction, and payment.
- Lao PDR: There is implementation guidance available for the MBS programme in Lao PDR, which includes facilitator's guides and trainee handbooks such as Business Skills Training, Entrepreneur Operating Model, Latrine Production & Installation, Sales Agent Training, as well as an overall implementation guide that includes templates and implementation tools.

• Bhutan: The Government of Bhutan has developed a set of detailed national guidelines for district-wide supply-side strengthening as part of its national Rural Sanitation and Hygiene Programme. The guidelines provide steps and procedures for 'SME Inventory & Engagement', 'SME-Community Linkages', 'Sales Coordination', 'Technical Guidance', 'SME Coaching & Monitoring', 'Awareness Creation' and 'Propoor Support'. The guidelines include templates, tools and forms for all topics.

Sources:

For Indonesia and Lao PDR, see WSP's 'Sanitation Marketing Toolkit' website at: https://www.wsp.org/sites/wsp/files/Sanitation%20Marketing%20Toolkits/toolkit/implementation.html

For Bhutan, see Bhutan's Rural Sanitation Hygiene Programme Supply Chain Strengthening Guidelines.

This is often done in collaboration with local government and community-level leaders. MBS programmes in Cambodia, Vietnam, Pakistan, Uganda, Malawi, Peru, Nepal, Nigeria, Madagascar, Bihar, and elsewhere have been executed with NGOs or other sector actors in such a lead role.

Even in cases where NGOs or other sector actors are lead implementers, MBS interventions have the highest likelihood of scaling up and sustaining if there is a clear plan for the progressive hand-over of key market facilitation roles to local government.

Regardless of the implementation model, all MBS programmes should consider the following operational guidance:

 Recruit a very strong overall programme co-ordinator, preferably with private sector experience, who will be responsible for managing all aspects of the programme.

- Maintain substantial field presence, including field area co-ordinators at sub-national and local levels – this is especially important at implementation phase start-up.
- Invest in substantial monitoring and data collection capacities, including a strong monitoring co-ordinator.
- Develop new roles and recruit (or outsource) all the new skills and competencies you will need.
 WASH sector experience can be optional.
- Wherever possible, invest in the development and refinement of standard operating procedures, simple guidance, tools/templates/ checklists and other job aides to assist local actors.
- Budget and plan for extra meetings to regularly bring field teams together to discuss progress, trouble-shoot challenges and brainstorm solutions.

Case study 8 Market facilitation in Bhopal, India

To support CATS in more remote largely tribal rural areas of Madhya Pradesh State, India, UNICEF developed and tested a 'WASH enterprise' model for rural sanitation marketing, together with development partners and government authorities. The model integrated outcomes from earlier work developing and testing new product designs and low-cost production methods, the 'Pan in the Van' marketing approach, and a supply chain expansion strategy centred around linking local toilet component production enterprises with local mason service providers and the Panchayat local government as duty bearer.

The model starts with one 'hub' WASH enterprise, designed to cover about 200 surrounding villages in unserved areas with limited access to sanitary ware supply chains and components for building toilets that appealed to customers. Four market facilitation activities were proposed to strengthen the WASH enterprise, promote sales after CLTS triggering, and link household demand with the local toilet enterprise and service providers:

- 1. Technical training to the local 'hub' WASH enterprise. This included quality production methods, business plan development, and sales/inventory projections, for supplying sanitary pans and toilet components to build the new toilet designs. Around 600 masons were trained on different technology options, quality aspects and supply chain management for toilet construction in the remotest locations.
- 2. Selection, training and support to a woman 'WASH promoter' in each village. The promoter was linked to the toilet production enterprise to promote the new toilet designs and sell components, directly after CLTS triggering. Women promoters would take orders for product purchase and delivery and receive a small sale commission from the enterprise. They would be identified from among active

- village women, women's self-help group members, or women involved in village-based development activities, and trained in household visits to provide information on the new toilet designs and sell components.
- A government supported free telephone help line and certification process. The help line would provide a single window for knowledge, information, and technical support to households and other stakeholders on the scheme and the location and contact of businesses providing toilet building services and components. A government database of the network of installation service providers and certified suppliers would need to be established and maintained as part of the help line service.
- **4.** On-going mentoring and support to local government and the WASH enterprise. Particularly in the start-up phase, this was needed to build capacity, strengthen the supply chain, build team partnerships, and improve governance including M&E. To strengthen sustainable market access, UNICEF envisions building on the platform and including other WASH consumer goods, such as soap, menstrual hygiene materials, household water treatment products, and related supplies. WASH 'stores' at the 'hub' location would be developed and linkages brokered to private sector actors in the supply chain, to assure local inventory and timely access to inputs for the WASH enterprise production centres and for village-based direct sales via women WASH promoters.

The WASH enterprise approach was to be standardized and expanded under the state-level 'MARYADA' women-centred sanitation strategy.

Source: von Medeazza, Gregor, et al, '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*" edited by Aidan Cronin, Pradeep Kumar Mehta, and Anjal Prakash, UNICEF-IRRAD, SAGE Publishers, 2014, pp. 231-248.

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4.2 Monitoring

Quick reference

Determining the indicators you want to track in order to measure MBS programme progress What does it involve? Developing a monitoring framework and systems, including the tools to track these indicators A clear results framework and monitoring indicators What are we trying to achieve? A robust monitoring system 1-3 months, during later stages of programme design, to be ready before How long will it take? programme launch Monitoring and programme management experience What skills Simple data collection forms and resources are required? Database and data entry skills and tools Plan and budget to ensure necessary data collection to measure equity, and obtain disaggregated data on changes in household toilet coverage and use, according to poverty and vulnerability classifications Use reliable poverty classification systems (e.g. national ID systems) where **UNICEF** equity and these exists, and/or harmonise with existing classifications and methods for gender reminders tracking poverty and vulnerability where possible • Ensure the financial and economic benefits of increased toilet sales are measured: collect and track data on gender among sales agents and focal point business owners, as well as of other paid (and unpaid) front-line actors in the new sanitation market

Overview

Once your MBS programme is up and running, you will need to be able to track its progress. Monitoring is an essential part of MBS implementation, particularly because MBS programmes expect to evolve and adapt their strategies and tactics based on real-time market feedback.

To measure your success, you will need to monitor outcomes and outputs that help to track customer demand and sales, business supply and profitability, and market enabling environment indicators. As your programme matures, you may also want to track indicators of market growth and sustainability. A robust system for monitoring outcomes and

outputs will enable you to make routine coursecorrections, modify your interventions and tactics, and set short-term targets. However, such monitoring systems do not replace the need for periodic evaluation of programme outcomes and macro-level systemic changes, including unintended consequences.

This section explores the different areas for MBS monitoring, including different indicators for measuring changes to household demandside, business supply side and market enabling environments. It is not necessary to track every indicator for each MBS objective: indicators should be selected from the menus below based on your programme and market context, budget, partners

and other factors. An example of an MBS results framework that brings these elements together is provided in *Annex 15*.

Monitoring overall programme outcomes

To measure household access, usage and behavioural outcome indicators, monitoring efforts should build on existing outcome monitoring metrics and mechanisms, including MICS and demographic and health surveys (DHS), and align with national monitoring efforts to track the sanitation SDG targets. These outcomes may also be periodically measured in UNICEF WASH sustainability checks; they should not be new or specific to MBS programmes, but rather represent sanitation outcomes to which strengthening the sanitation market can contribute.

Monitoring household and community objectives

This involves tracking changes in household improved toilet ownership by poverty status or income group and gender-disaggregated usage over time (e.g. SDGs). This does not require new sanitation monitoring frameworks or indicators, so you can use what already exists.

In addition to core household outcome indicators, household surveys and focus groups can be used to track changes in intermediate objectives such as household awareness and access to new products and services, intention to purchase, level of investment and customer satisfaction (see Table
25). Such surveys can be done using a random sample of households, rather than as part of the more detailed CATS baseline survey. Periodic monitoring of some indicators may be appropriate during WASH sustainability checks. Tracking these indicators can:

- Help programmes assess the effectiveness of promotional messages and activities.
- Provide feedback to inform improvements in the product and service offering.
- Track changes in overall market size in terms of new household demand.

Most CATS monitoring mechanisms record both the number of household toilets and the percentage sanitation coverage within a community, as well as overall ODF status. For MBS, it is also important to monitor whether toilets meet the WHO/UNICEF Joint Monitoring Programme's definition of an improved toilet facility. In Indonesia, for example, the Government's MBS programme supports sanitation committees and CLTS natural leaders to measure progress towards ODF and also track the type of toilet ('improved' or 'unimproved')

Table 24: Outcome indicators for MBS

Outcome indicators

Programme outcome: Increase in basic sanitation uptake and usage among target low-income households

Mechanisms What are we trying to measure? **Outcome indicators** How are MBS interventions • # and % of people in intervention communities MICS, DHS accelerating access to basic that use household toilets / have basic sanitation Can be and/or safely managed services, disaggregated by sex, disability and wealth incorporated sanitation services? ranking into CATS # and % of identified poor households gaining an Who can access basic and/ monitorina or safely managed sanitation improved toilet and WASH services? Are interventions sustainability • # and % increase in improved toilet coverage increasing access and use for checks (moved from OD; moved from unimproved) the poor and poorest? • # and % of verified ODF communities • # and % of verified ODF communities that maintain their ODF status for at least one year

and whether the poor are gaining access, using a community map. This data is uploaded monthly by district government staff using a phone-based text messaging system, and is made available in real time online.

Monitoring business and supply chain objectives

This involves monitoring businesses to explicitly measure changes in private sector supply of household toilet system offerings. Usually, new monitoring frameworks and indicators are needed since government and support agency monitoring typically does not track private sector

data. Monitoring businesses involves regular tracking of sales and other indicators of success and sustainability of individual businesses, as well as sales agents' performance, in order to track expansion and identify evolving supply-side barriers.

MBS intervenes in new ways on the supply side, so additional monitoring tools are needed to track supply-side impacts. Supply-side and business-level indicators can be measured by undertaking two primary tasks: sales monitoring and business profile monitoring. It is also important to understand how effectively the supply chain is meeting the needs of low-income consumers.

Table 25: Suggested outputs and indicators for household and community objectives

HOUSEHOLD/COMMUNITY OBJECTIVES

Programme objective: Increase target low-income household consumer demand for and investment in basic sanitation and safe sanitation services

What are we trying to measure?	Indicators	Mechanisms
How are MBS interventions increasing household awareness, intention and motivation to invest in sanitation improvements?	 # and % of households (HHs) having purchased improved product systems, for new toilet construction and/or upgrading existing facilities, including proportion from bottom two quintile(s) % of HHs having fully installed new facilities % of HHs demonstrating proper use of new products/services % of HHs satisfied with new toilet facilities Average total HH investment in new toilet facilities, including products, services, transport (can be expressed as % of average household income/ consumption for each segment) 	May require baseline and periodic surveying of a sample of households Can be incorporated into WASH sustainability checks
How effective and sustainable are demand-creation and promotional activities?	 % of HHs recalling demand activation messages and materials, and product information such as costs, businesses, or sales points # of villages receiving promotional activities such as interpersonal communication channels # of people reached by promotional activities # of new sales agent/promoters who generate sales of toilet facilities 	Requires baseline and periodic surveying of a sample of households
How are financial barriers to investment being addressed through the market and/ or complimentary financing mechanisms?	 # of MFIs offering sanitation consumer loans # of new loans, average loan size and repayment rates for sanitation consumer loans # of poor HHs accessing improved toilets through alternative financing mechanisms 	Requires baseline and periodic surveying of a sample of households

Box 28: Building equity tracking into MBS monitoring systems

MBS programmes should plan and budget for collection of data to measure equity. Household surveys will be one of the critical ways to measure how well the poor and poorest can participate in the new sanitation market (this can also be captured through community mapping). As a baseline, household surveys can use reliable poverty classification systems (e.g. national ID systems) where these exist, or develop standard poverty and vulnerability indicators to allow the programme to disaggregate outcomes by wealth/income quintile, gender, and for vulnerable groups. Follow-up assessment two to three years after implementation begins can help your programme learn how well these groups are being reached.

Periodic focus groups with households in the bottom two wealth quintiles can also help your programme's impact on the poorest, and what can be done to develop more specific strategies to reach this segment and/or address different affordability barriers.

MBS programmes require time for marketing messages and new products to penetrate the market, so be sure to allow sufficient time before collecting evidence on how well poorer households are being reached. Collecting good evidence on which households are unable to afford new toilet products will help determine what financing options might work best for these segments.

Consult with government statistics bureaux, other agencies and UNICEF evaluation officers to ensure you are leveraging existing data and harmonising with existing national classifications and methods for tracking poverty and vulnerability.



Table 26: Suggested outputs and indicators for supplier and supply chain objectives

Business and supply chain

Programme objective: Improve market supply of affordable, desirable toilet product systems to underserved target low-income households

What are we trying to measure?	Indicators	Mechanisms
How well do products and services meet the needs of low-income consumers? Are focal point and networked businesses increasing availability of products and services to low-income households? How financially sustainable	 # of new toilet sales reported by all programme-supported businesses (cumulative) Average # of new sales per business (and/or total per month) Average # of villages reached by businesses, and geographic area covered (or proportion of geographic area covered) Average # of sales per village 	Typically requires developing new sales tracking mechanisms and databases
and viable are sanitation business activities? What is the likelihood that activities will continue over time? What are the characteristics of high-performing businesses? What incentives are there for businesses to enter and expand sanitation service provision?	 # and type of consumer-driven design improvements to product/service offering % decrease in costs of new product/service offerings from baseline products # of businesses offering new products/services # of businesses receiving training and support Average % increase in toilet sales revenue per programme-supported business Toilet-related sales revenue as % of overall business activity (change from baseline) Cash and resource investment by businesses in toilet-related business activities (equipment, tools, vehicles, stock, staff) # and % of programme-supported businesses generating profit from toilet-related sales, and whether annual income (profit amount) is sufficient to remain in the new toilet market # of new loans, average loan size and repayment rates for sanitation business lines 	Typically requires developing new business monitoring mechanisms
	 Existence of positive working relationships between focal point business and key network businesses for the delivery model Existence of positive working relationship between focal point businesses and community-based sales agents/promoters 	Supply-side data should feed into WASH-BAT service delivery monitoring and be integrated with outcome and demand data

Tracking sales

Sales monitoring tracks the number of new toilet facilities sold or constructed (or other sanitation-related services provided) each month by each partner business. Tracking and mapping sales trends can:

- Provide insights into the effectiveness of demand activation activities and sales promoters, as well as insights into customer purchase preferences.
- Help understand impacts of external factors such as seasonal demand, transport, and labour availability. This can be used in programme planning and budgeting, and to guide businesses on production and/or stock management.
- Identify geographical areas that are being neglected by businesses due to low profitability or other constraints.
- Help the programme identify and assess critical success factors of high-performing businesses that can be used to refine the selection process and business support.
- Motivate and incentivise businesses through healthy competition, e.g. by reporting regularly collected sales data and rewarding high achievers.

For an individual small business, sales monitoring is an important simple first step towards improving business management. Depending on the size and nature of the business, the programme will likely need to develop or adapt user-friendly monitoring tools for each focal point business to use. For smaller businesses such as masons, for whom literacy and numeracy may be an issue, consider picture-based tracking tools with simple tallies, or verbal reporting at a regular (monthly or bimonthly) meeting. For literate and numerate small businesses, consider paper-based tools, such as a sales record books and purchase orders. Annex 16 gives an examples of a simple receipt for the sale of a toilet, while Annex 17 provides an example of a supplier sales order record book. Several large-scale MBS programmes are beginning to incorporate digital sales monitoring into simple smart phone apps and text messaging services - though this requires additional resources, training and technical

assistance. If you are working with larger scale manufacturers, importers or wholesalers, they will likely have their own (electronic) systems. In this case, you will need to work with the firms to get the relevant data you need for programme reporting. The WSP 'Sanitation Marketing Toolkit' website 'Implementation' page has examples of monitoring tools for tracking toilet sales and other elements of MBS programmes (see Resources and further reading at the end of this section). Sales data that is collected monthly at business level will need to be collated and entered into an MBS programme sales monitoring database. It is best if sales data can be entered alongside villagelevel outcome data in a single database to enable cross-checking and more detailed analysis of trends. Simple, easy-to-use databases and software are often the most efficient and effective for sales data monitoring. Business-level sales monitoring can be done by the MBS implementing partner, contracted business development service providers or in-house, depending on roles and capacities within your MBS programme. Ideally, you might want local government to do this; however, keep in mind that small businesses often operate somewhat informally, and it is possible they may uncomfortable sharing their business details with government.

Business profile monitoring

Business profiles capture key data about partner businesses and how their operations evolve over time. Business profiling should be done at the start of programme engagement, as a part of the business selection process (see 4.1 Programme implementation). Use a simple survey tool to collect basic details of each business, including: owner name(s), gender, location, current product/ service offering (including prices), average monthly sanitation sales (i.e. number of toilet product customers/toilet products purchased), average revenue from sanitation (last 12 months, or monthly average), current equipment and tools, number of staff, and other basic details. The profile can also record up-front investments that the business makes (e.g. in new tools and equipment) at the start of MBS programme engagement. Updating business profiles (e.g. annually) can help the programme track changes in revenue and profits, business investments, and geographic

expansion over time. For example, the WaterSHED Cambodia programme uses business profiles to track changes and benchmark individual businesses within the network and provides regular online updates of business performance. In Malawi, Water for People uses business profile monitoring to assess business model viability, and to determine what programmatic strategy changes are needed.⁷⁸

Monitoring the business environment

This involves monitoring the roles and performance of market facilitators. This may involve government at all levels, with a focus on local government, as well as others such as NGO partners who are helping to facilitate the market. This type of monitoring can help to assess the sustainability of MBS interventions and when external support can be phased out.

Measuring changes to the sanitation business environment is vital – but it is difficult to do

in practice, since many of the indicators are qualitative in nature. Measurement will typically involve subjective evaluations, ranking, or scoring the performance of key market facilitation actors against agreed roles and functions. Where possible, monitoring of market facilitation should build on and/or feed into broader enabling environment assessments.

An area where more evidence and experience is needed within MBS programming is on market interactions and performance. Monitoring market health for sanitation is not a well-defined area of work, but it could help to ensure that we understand any unintended consequences of MBS interventions on the market so that we can adapt. To capture changes in market characteristics, MBS monitoring might seek to assess differences in market characteristics: affordability, availability at different levels, assured quality, appropriate design, and awareness. MBS monitoring could also explore how the intervention is addressing bottlenecks

Table 27: Suggested indicators and mechanisms for monitoring the business environment

Business environment

Programme objective: Increase ability to facilitate and regulate the sanitation market to reach low-income households

What are we trying to measure?

Are national and sub-national government increasing capacity to monitor, facilitate and regulate new markets?

How do government and other partners support businesses to expand services to low-income households?

Is external technical support to government and the private sector demand-driven? Is there an exit strategy?

Outcome indicators

- Existence of active private sector development programme for rural sanitation and hygiene, supported by government regulations, laws, financing and incentive systems
- # of national government and local district/province guidelines and benchmarking for private businesses to regulate quality standards and fair pricing
- Type, extent and quality of business development services, including skills development and incentives
- Quality and extent of market facilitation mechanisms implemented in practice
- % local government budget allocated to CATS/MBS activities
- # of districts/provinces requesting MBS technical support
- # and type of exposure visits to demonstrate MBS facilitation activities
- # of staff trained to deliver MBS market facilitation and monitoring

Mechanisms

Can feed into WASH-BAT and other enabling environment frameworks

⁷⁸ For more on Malawi MBS programme monitoring, see Sparkman, 2013. See Resources and further reading section at the end of the chapter.

Table 28: Monitoring market interactions and examples of the desired market situation

	Definition	Desired situation
AVAILABILITY	Capacity of sanitation product systems supply to meet household demand; and consistency of local access at delivery points.	Sufficient volumes of appropriate sanitation product systems are offered and can be easily accessed by households in their respective geographic area.
AFFORDABILITY	Extent to which the price point maximises market efficiency between customers and entrepreneurs to support sanitation outcomes. It is not focused on purchase price alone but can include other considerations that make up the total cost of ownership.	Prices are low enough to meet households' ability and willingness to pay and to make widespread use of the product system cost effective. Prices are high enough to incentivise existing entrepreneurs to remain in business and new entrepreneurs to enter the market.
QUALITY	The standard of available sanitation product systems measured against a set of defined quality measures and criteria, including technical specifications; good manufacturing practices; recognised national regulatory authority approval.	Products meet established quality standards. The extent to which sub-standard product systems are offered in the market is significantly lowered.
ACCEPTABILITY	Degree to which sanitation product systems meet cultural norms, maximise choice and ease of use and meet the constraints of entrepreneurs.	Product system designs are culturally appropriate and well-adapted for low-income settings. The number of options available in the market has been streamlined for efficiency, and the options are available and do not compromise choice.
COMPETITION	A competitive market is one in which large numbers of entrepreneurs compete with each other to satisfy the wants and needs of a large number of customers. In a competitive market no single entrepreneur, or group of entrepreneurs, can dictate how the market operates.	Product systems offered by a competitive, reliable supply base. The non-existence of a monopoly (single supplier), oligopoly (little competition/ collusion), or a supplier dominating or controlling market share. Increasing number of market entries over time.
DELIVERY	Delivery refers to logistical/supply-chain characteristics of a product system. Characteristics affecting the delivery of a product system to end-users, affecting or limiting an end-user's access to benefit from the product system (e.g. transport, warehousing, construction).	Product systems are delivered cost effectively. Orders are delivered reliably and on time.

Source: Adapted from USAID (2014).

Table 29: Exploring systemic change – examples of potential areas of change

How are MBS interventions changing relationships, power dynamics, norms, and behaviours?

HOUSEHOLD/ COMMUNITY

- Attitudes and norms around open defecation and safely managed sanitation
- Toilet ownership perceived as an indicator of social mobility
- Greater role of women in decision-making
- Increased trust levels between customers and sanitation businesses

BUSINESS/ SUPPLY CHAIN

- Businesses share know-how with peers in other geographies
- Businesses partner with locally influential sales promoters, sanitation leaders or loan officers
- Strength of supplier referral networks

BUSINESS ENABLING ENVIRONMENT

- Government withdrawal from market as a supplier of toilets
- Ability of women or excluded groups to leverage credit history and access finance
- MFIs treat sanitation loans on par with other consumption loan products

such as high transaction costs, unequal market information, or unbalanced supplier and buyer risks. While there are not yet established indicators or targets in this area, <u>Table 28</u> outlines definitions for different dimensions of market health that could be considered as markets mature.

Exploring systemic change

Potential broader, system-level changes produced by an MBS programme in later phases of implementation is an emerging area of interest. Table 29 considers topics and areas to explore in evaluating systemic changes induced by MBS interventions.⁷⁹

Practical tips

UNICEF is committed to building government capacity at every level to track progress towards sanitation for all. In most countries, the primary way this will be done is by measuring progress towards open defecation-free communities, as well as supporting national level surveys such as MICS and DHS. As you begin to consider MBS as a progression of CATS work, some tips for expanding your monitoring frameworks are outlined below.

Build on and harmonise with existing national monitoring systems

Developing and improving national monitoring systems is a core area of UNICEF's enabling environment support. Some MBS indicators can be incorporated into these systems, and others may be better suited to UNICEF programme-related monitoring systems that exist and are used by implementation partners. Monitoring household access and behavioural outcomes should be part of broader national monitoring system strengthening efforts to improve and systematise community-level monitoring systems, particularly at post-triggering and post-ODF stages of the CATS/CLTS process. Core demand-side indicators should align and harmonise with efforts to track progress against the SDGs. Avoid duplicating efforts; if different agencies are supporting implementation of MBS and CATS, UNICEF can support the development of a common national framework and procedures. Consider how community-level data will be fed into the government's regional and national databases. This may include exploring the role that technology such as mobile phones or tablets might play in monitoring systems.

⁷⁹ For a broader discussion of changes to the business environment and context from MBS interventions, see USAID's *Scaling MBS* desk review in Resources and further reading at the end of this section.



Focus on equity

Focus on what matters most: the proportion of low-income target populations having and using basic sanitation and safely managed sanitation services. MBS programmes and evaluations of these programmes have tended to overemphasise toilet sales, using this as a measure of programme success and scale. However, toilet sales by themselves are not a measure of successful market penetration, and need to be viewed in context. If your overall market size is small, an MBS programme may have low toilet sales but still result in a high proportion of households gaining access. In Bhutan, a country of under one million people, a pilot MBS programme in one district resulted in a reduction of unimproved toilet coverage from a baseline of 61 per cent unimproved to just 12 per cent unimproved one year later.

Although the total number of toilet systems sold, installed and in use was 'only' around 1,400, the pilot was an unequivocal success and was later scaled up nationwide. A toilet sold but not installed offers no value, and a toilet installed but not regularly used, or not safely emptied, is similarly

not delivering the intended health benefit. Place your demand-side emphasis on tracking the core sanitation indicators – that is, the SDG targets.

Budget and plan for development of a sales and business database

Since market supply-side and business monitoring may be a fairly new area, consider recruiting technical input from small business development service providers to help design and test sales and business monitoring tools at the start of your MBS programme. This can be done as part of business development and training activities during implementation. Ongoing collection of sales monitoring data can be done by field staff or other field-based partners. However, it is probably best to avoid the use of identified natural leaders or CATS facilitators in this sort of supply-side monitoring, which happens at a much wider geographic scale and requires specific business development skills. Where possible, align geographic identifiers and location information for MBS supply-side data (e.g. on sales) with existing central databases and national systems to enable and align trend and spatial analyses.

Resources and further reading

Sparkman, D. (2013). From Beneficiaries to Businesses to the Big Picture: Monitoring for Sustainability in Market-based Approaches to Sanitation. Available at: https://www.ircwash.org/sites/default/files/sparkman_from_beneficiaries_to_businesses.pdf

UNICEF (2016). Strengthening the enabling environment for WASH: Guidance note. Available at: https://wash-guidance-note-draft-updated-lr1.pdf

UNICEF (2012). Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT) User Manual and Tool. Available at: https://www.washbat.org/

UNICEF (2013). Enhanced Programming and Results through Monitoring Results for Equity Systems (MoRES). (Briefing note). Available at: https://www.unicef.org/about/employ/files/MoRES_Briefing_Note.pdf

USAID (2014). Healthy Markets for Global Health: A Market Shaping Primer. Available at: https://www.usaid.gov/sites/default/files/documents/1864/healthymarkets_primer.pdf

USAID (2018). Scaling Market-Based Sanitation: Desk Review on Market-Based Rural Sanitation Development Programs. Available at: https://files.globalwaters.org/water-links-files/Scaling%20 Market%20Based%20Sanitation%20JUNE2018.pdf

Annexes

Annex 15: Example MBS results framework

Annex 16: Example toilet sales receipt

Annex 17: Example supplier sales order record book

Case studies and country examples – sources and further information

Benin

WSP (2011). Experiences from Rural Benin: Sanitation Marketing at Scale. (Field note). http://www.wsp.org/sites/wsp.org/files/publications/wsp-benin-sanitation-marketing.pdf

Cambodia

WaterSHED Cambodia Case Study (FSG 2018)

WaterSHED Cambodia (links to online pubs and research reports at their website)

Indonesia

WSP (2011). Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java. (Working paper). Available at: https://www.wsp.org/sites/wsp/files/publications/WSP-Monitoring-Information-TSSM.pdf

WSP (2014). Scaling Up Indonesia's Rural Sanitation Mobile Monitoring System Nationally. (Learning note). Available at: https://www.wsp.org/sites/wsp/files/publications/WSP-Indonesia-Mobile-Monitoring.pdf

Vietnam

WSP (2010). Case Study on Sustainability of Rural Sanitation Marketing in Vietnam. (Technical paper). Available at: https://www.wsp.org/sites/wsp/files/WSP_SustainabilityCaseStudy_TSSM_optimized_lowest.pdf

Websites

STBM (Sanitasi Total Berbasis Masyarakat) Indonesia: 'Online monitoring database'. At: http://www.stbm.kemkes.go.id/

WSP: 'Enabling Environment Assessments and Tools'. At: http://www.wsp.org/global-initiatives/publications-and-tools-0

WSP: 'Sanitation Marketing Toolkit'. At: https://www.wsp.org/sites/wsp/files/Sanitation%20Marketing%20Toolkits/toolkit/toolkit-home.html

USAID: 'WashPaLS Enterprise Viability Toolkit'. At: [forthcoming]

USAID: 'WashPaLS Enterprise Viability Case Studies'. At: [forthcoming]







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