



# ENTERPRISE VIABILITY & SUSTAINABILITY DIAGNOSTIC TOOLKIT



FSG

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## PREFACE

The Water, Sanitation and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) project is a 5-year task order awarded to Tetra Tech on 16 September 2016 under USAID's Water and Development Indefinite Delivery Indefinite Quantity Contract (WADI). Tetra Tech implements the project in collaboration with several non-governmental organizations and small-business partners—Aquaya Institute, Family Health International (FHI 360), FSG, and Iris Group—that contribute expertise in state-of-the-art WASH programming and research. Distinguished academics, practitioners, and policy makers from across the WASH sector regularly provide expert perspectives to the project through an internal research working group and an external WASHPaLS Advisory Board.

WASHPaLS supports the Agency's goal of reducing morbidity and mortality in children under five as part of the Ending Preventable Child and Maternal Deaths initiative by ensuring USAID programming employs high-impact, evidence-based environmental health and WASH interventions. The project identifies and shares best practices for achieving sustainability, scale, and impact by generating evidence to support the reduction of open defecation and movement of communities up the sanitation ladder while also focusing on novel approaches for reducing feces exposure to infants and young children (IYC). Specifically, the project:

1. offers USAID missions and technical bureaus ready access to thought leaders and analytical expertise across a wide range of WASH themes in response to their needs (Component 1);
2. generates evidence through implementation research to increase the sector's understanding of and approaches to sustainable WASH services, the effectiveness of behavioral and market-oriented approaches to sanitation, and measures to disrupt pathways of fecal exposure to infants and young children (Component 2);
3. administers a small grants program on innovations in hygiene behavior change (Component 3); and
4. engages and partners with national and global stakeholders to promote the use and application of WASHPaLS-generated evidence and global best practices by practitioners and policy makers, tapping into broad coalitions and dynamic partnerships (Component 4).

## INTRODUCTION

Inadequate access to sanitation remains a significant problem globally. According to the Joint Monitoring Programme (WHO/UNICEF 2015), 2.4 billion people still do not have access to basic sanitation facilities, while 970 million people still practice open defecation. Inadequate sanitation is linked to the transmission of numerous communicable diseases—particularly cholera, dysentery, hepatitis A, typhoid, and polio—with a disproportionately large effect on children. The scale of investment required to deliver sanitation services to the hundreds of millions of people around the world that currently lack access is staggering, and is beyond the capacity of public finance alone.

Experts increasingly view market-based sanitation (MBS)—through which private sector actors supply toilets and related services to individual households—as a promising approach to deliver onsite sanitation products and services to low-income populations that are not connected to centralized wastewater collection and conveyance systems. Successful MBS interventions in Southeast Asia and Bangladesh demonstrate the promise of this approach, but the consistent achievement of scale of such interventions has been a challenge.<sup>1</sup> A USAID desk review on MBS interventions identified a range of barriers to scaling sanitation markets, which included among others, an inadequate supply base for toilets (USAID, 2018).

A strategy of many MBS programs is to increase the participation by local entrepreneurs in the sanitation value chain. However, the viability and sustainability of sanitation enterprises often pose a barrier to attract and retain entrepreneurial participation in sanitation markets (USAID, 2018). While the USAID desk review found a range of tactics and factors that enabled enterprises to grow and thrive, evidence on the key drivers of enterprise performance was unclear. Further, MBS programs typically have a limited understanding of the viability and sustainability of the enterprises they foster, as many do not track

their financial performance. Tracking enterprise performance is often limited to the number of toilets sold, but this measure alone does not provide a complete picture; high sales volumes do not necessarily correspond to large profits and vice versa. Consider two hypothetical sanitation enterprises: Acme and Best. Both sell toilets, albeit at different prices and with variance in sales volumes (Table a). Despite Best selling only a third of the toilets as Acme, it generates a profit of USD 400 (compared to USD 300 generated by Acme) due to the significantly higher profit (price less cost) per toilet. Both are, strictly speaking, profitable, but what can we say about the *viability* of these enterprises, especially over time (i.e., their *sustainability*)?

MBS programs need to have a more nuanced understanding of the factors influencing the viability and sustainability of enterprises to provide the support that enterprises need to grow and thrive. As a first step towards helping MBS programs achieve this objective, WASHPaLS analyzed the performance of sanitation enterprises supported by MBS interventions in India, Nigeria, and Cambodia.

**Table a. Acme and Best enterprise summary**

Metric	Acme	Best
Price per toilet (a)	USD 50	USD 80
Cost per toilet (b)	USD 40	USD 40
Profit per toilet (p=a-b)	USD 10	USD 40
# of toilets sold (q)	30	10
Total Profit (p X q)	USD 300	USD 400

<sup>1</sup> USAID. 2018. Scaling Market-Based Sanitation: Desk Review on Market-Based Rural Sanitation Development Programs. Washington, DC. Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS)

The methodologies applied by WASHPaLS can aid MBS programs in understanding and improving the viability and sustainability of the sanitation enterprises under their purview. We have developed this toolkit to help other MBS programs implement these methodologies in their contexts.

For the purposes of this toolkit, “MBS program” will refer to the staff of and consultants to implementers of an MBS program. “Sanitation enterprise” or “enterprise” will refer to a private sector entity that collaborates with an MBS program to supply sanitation products and services in the market.

#### **Box I: Profit vs. profitability vs. viability vs. sustainability**

**Profit** is the revenue generated by an enterprise in excess of its costs, expressed in absolute terms (USD).

**Profitability** refers to a profit relative to the scale of an enterprise, such as **profit margin**—the ratio between profit and sales expressed in percentage. Two enterprises may have equal profits (say, USD 1,000 annually), but one earning USD 1,000 in profit against USD 10,000 in sales is more profitable (10% margin) than another one earning USD 1,000 against USD 50,000 in sales (2% margin).

**Viability** refers to profit relative to a variety of explicit or implicit factors considered by an entrepreneur (e.g., minimum income expected; income from other non-sanitation specific enterprises; time and effort; or financial investment and risk). Unlike profit, or profit margin, which are specific numerical quantities, viability is a subjective measure which varies from entrepreneur to entrepreneur: an enterprise that makes a profit might be considered viable by one entrepreneur but not by another. We posit that, in general, *increasing profit improves the viability of an enterprise*.

**Sustainability** refers to the *likelihood* that an enterprise remains viable over an extended period of time (i.e., multiple years) and continues operations without external, non-market-based support.

## **OBJECTIVE AND APPROACH OF THE TOOLKIT**

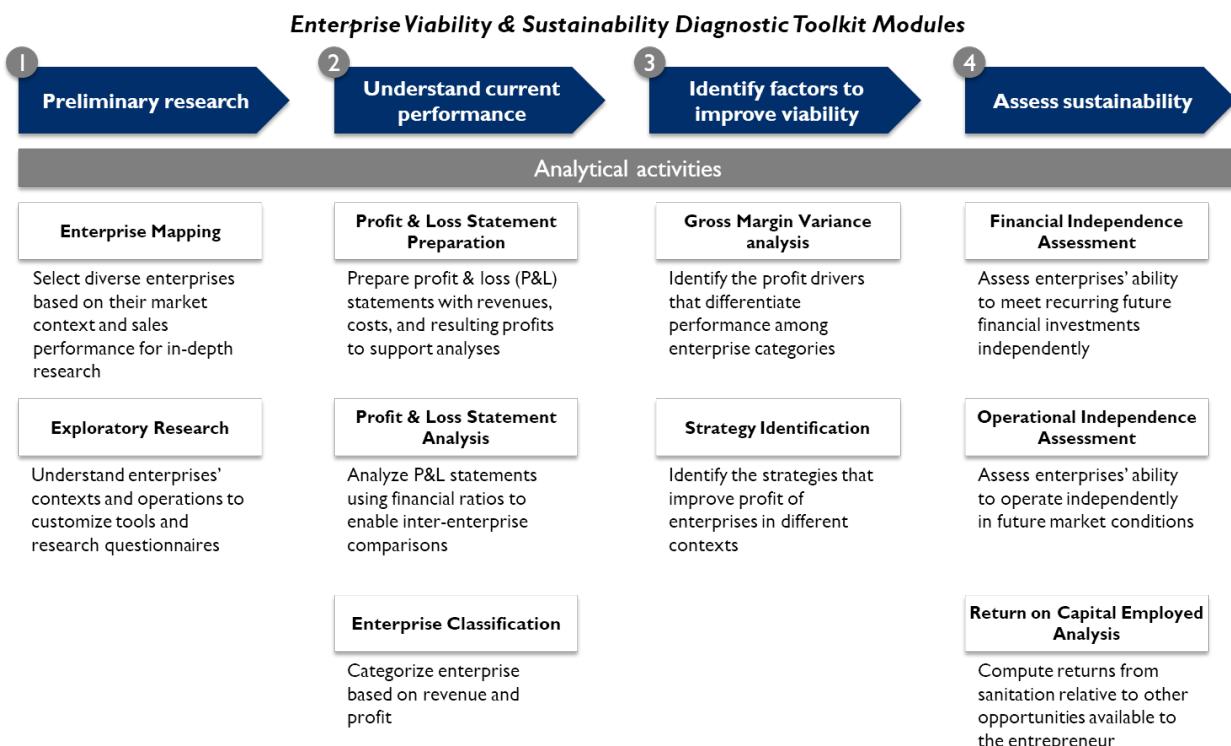
The immediate objective of this toolkit is to equip MBS programs with tools to better understand and ultimately improve the viability and sustainability of sanitation enterprises in their contexts. In the longer term, our hope is that the adoption of the toolkit will generate further evidence on enterprise viability and sustainability to establish a growing record of best practices.

The toolkit will help MBS programs understand the factors that differentiate the performance of enterprises at different levels of profits. This approach is based on the assumption that viability, and sustainability by extension, are functions, in part, of profit (see Box I). Thus, a comparative analysis of enterprises with different profit levels will help identify strategies to improve the viability of relatively lower-profit sanitation enterprises.

The toolkit enables research and analytical activities with examples provided to illustrate concepts, methods, and instructions. The toolkit, including the examples, does not provide guidance or recommendations on the strategies and practices to improve the viability or sustainability of sanitation enterprises. Readers should refer to literature or other resources that fulfill this objective. Such guidance is available, for instance, in the USAID [Creating Viable and Sustainable Sanitation Enterprises: Guidance for Practitioners](#) report and supplementary case studies on sanitation enterprises in [Cambodia](#), [India](#), and [Nigeria](#). These resources are based on the approaches and methods described in this toolkit and demonstrate the types of analyses and strategies that practitioners can aim to generate for guiding their partner sanitation enterprises.

The toolkit is comprised of four modules (see Figure I), which offer activities to conduct a comparative analysis of enterprises and develop a nuanced understanding to improve viability or sustainability.

**Figure 1: Toolkit overview**



## HOW TO USE THE TOOLKIT

The four modules of the toolkit are designed to be used sequentially by MBS programs. The intended outcomes of each module are:

- Module 1: Enterprises mapped according to their location characteristics and sales performance, a sub-set of enterprises selected for comparative research if the number of partner enterprises is large, and a preliminary understanding of their operations to contextualize the data collection and analytical tools
- Module 2: Financial performance data generated for the sub-set of enterprises selected from Module 1; enterprises classified based on their revenue and profit performance to enable inter-enterprise comparative analyses in Module 3
- Module 3: Identification of the profitability drivers, including underlying business practices and contextual factors, that explain why some enterprises perform better than others as per the classification generated by Module 2
- Module 4: A view on the ability of sanitation enterprises to operate in the long-term without external non-market support (e.g., direct or indirect support by donor-funded MBS programs)

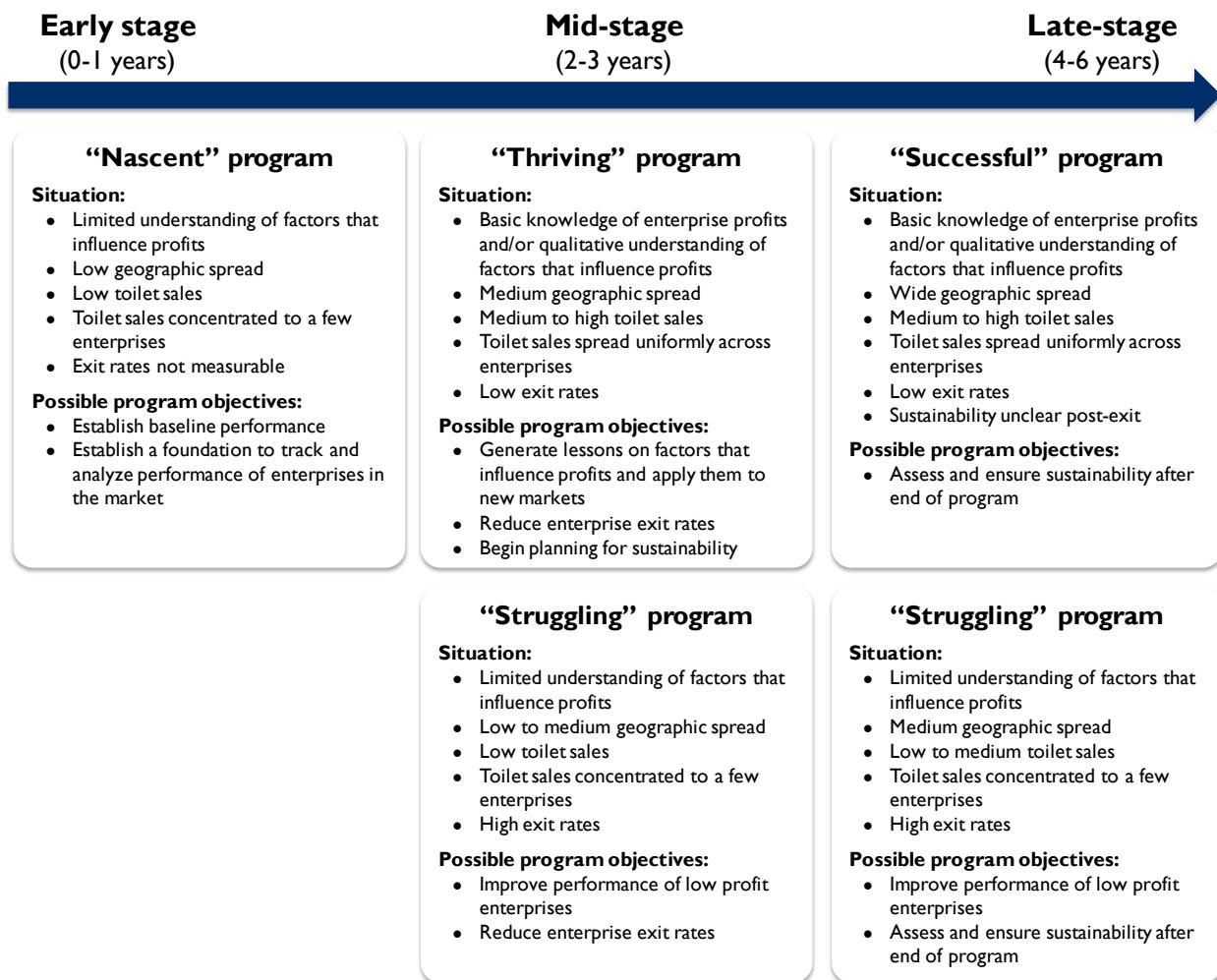
However, it is likely that different MBS programs will have different priorities and varying levels of resources to implement the toolkit, based on their unique situation.

Therefore, we have identified five illustrative situations faced by MBS programs (see Figure 2) and provide recommendations for priority modules based on possible program objectives for these situations (see Figure 3). The five situations described are not exhaustive, but are often encountered or likely possibilities in the sanitation sector. While MBS programs may not fully identify themselves with any one situation, they can still use the recommendations listed in Figure 3 based on the situation or

possible program objectives that most closely resemble theirs. Notwithstanding the prioritization, the modules are interdependent primarily for data requirements. MBS programs should carefully review these before they implement a module.

Practitioners should note that the toolkit is designed for use by MBS program implementers (i.e., staff and consultants) to assess and advise partner sanitation enterprises. It is not intended for direct use by the partner entrepreneurs.

**Figure 2: Typical situations faced by MBS programs**



### Practical Tip – Identifying an MBS program's situation

MBS programs can identify with a situation by answering three key questions:

- How do enterprises' average toilet sales compare with their market size (i.e., unserved households)?
- Are the majority of enterprises continuing in or exiting the market?
- What is the program's depth of understanding of factors impacting enterprise profits?

Programs with medium to high average sales per enterprise, few exited enterprises, and at least basic knowledge of factors that influence enterprise profits will typically be "Thriving" or "Successful."

Programs with low average sales, many enterprises exiting, and limited knowledge of profit factors will typically be 'Struggling.'

Programs with low average toilet sales and few enterprises established will typically be 'Nascent.'

**Figure 3: Module recommendations for different MBS programs**

Program Situation	Module Recommendations with Rationale			
<b>"Nascent" (early stage)</b>	<b>Preliminary research</b>	<b>Understand current performance</b>	Identify factors to improve viability	Assess sustainability
<b>"Thriving" (mid-stage)</b>	Preliminary research	Understand current performance	<b>Identify factors to improve viability</b>	<b>Assess sustainability</b>
<b>"Struggling" (mid-stage)</b>	<b>Preliminary research</b>	<b>Understand current performance</b>	<b>Identify factors to improve viability</b>	<b>Assess sustainability</b>
<b>"Successful" (late-stage)</b>	Preliminary research	Understand current performance	Identify factors to improve viability	<b>Assess sustainability</b>
<b>"Struggling" (late-stage)</b>	<b>Preliminary research</b>	<b>Understand current performance</b>	<b>Identify factors to improve viability</b>	<b>Assess sustainability</b>

Low priority      Medium priority      High priority

In order to assist MBS programs in implementing their selected modules, each module contains:

- Detailed guidelines to implement each activity that is part of the module
- Sample templates and examples for select activities
- The data requirements for each activity

MBS programs can refer to the data requirements to decide whether to implement the preceding modules.

The data required for several activities will need to be obtained through field interviews with entrepreneurs. The toolkit contains a sample interview guide for interviewing entrepreneurs to gather data for in-depth viability and sustainability research (based on Modules 2-4). The toolkit also contains two interview guides for conducting exploratory research under Module I—one for interviewing entrepreneurs and another for interviewing demand activators. MBS programs can use these interview guides as-is or adapt them for their specific situations.

We also recognize that our toolkit is primarily geared towards improving viability and sustainability of enterprises that typically,

- manufacture and assemble multiple components required to construct a toilet;
- offer services such as delivery and installation;
- operate from a fixed location;
- run along entrepreneurs' other business lines (e.g., concrete products manufacturing, home improvement contracting, building materials retail); and
- tend to be small and/or informal (i.e., unregistered, excluded from the formal tax net)

This is due to our experience of studying enterprises in India, Nigeria, and Cambodia such as cement ring or cement block manufacturers that exhibited these characteristics. However, the toolkit is not limited to analyzing such enterprises and is applicable to a wide range of enterprises that exhibit one or more of the above characteristics.

In many settings, MBS programs will work with enterprises that have different, often simpler configurations—the toolkit is applicable in such contexts and MBS programs can adapt it by ignoring irrelevant elements or in a few instances, taking alternate steps. We provide *Adaptation Guidelines* for two additional enterprise models, other than the above, that we have observed in the sanitation sector (see Table 1). MBS programs can refer to these guidelines if the enterprises in their contexts do not share the characteristics specified above. We recommend that MBS programs still review the different activities of the toolkit in detail before adapting them to ensure proper comprehension.

**Table 1: Additional enterprise models**

Enterprise model	Description	Manufacture & assemble components?	Offer services?	Fixed location?	Other business lines?
<b>Mason enterprise</b>	A mason provides installation services to customers and provides information on procuring all the materials required to construct toilets	✗	✓	✗	✓
<b>Hardware store enterprise</b>	A hardware store provides select components (which it trades but does not manufacture) to customers, and provides information on	✗	✗	✓	✓

	procuring remaining materials and connecting with masons				
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**Table 2: Constituent documents of the toolkit**

Module	Constituent Documents	Format
<b>Preliminary research</b>	<i>Enterprise Mapping</i> guide	PDF
	<i>Enterprise Mapping</i> example	Excel
	<i>Exploratory Research</i> guide	PDF
	Data requirements for <i>Prepare for In-Depth Research</i> module	PDF
<b>Understand Current Performance</b>	<i>Profit &amp; Loss Statement Preparation</i> guide	PDF
	<i>Profit &amp; Loss Statement</i> template	Excel
	<i>Profit &amp; Loss Statement Analysis</i> guide	PDF
	<i>Enterprise Classification</i> guide	PDF
	Data requirements for <i>Understand Current Performance</i> module	PDF
<b>Identify Factors to Improve Viability</b>	<i>Gross Margin Variance Analysis</i> guide	PDF
	<i>Gross Margin Variance Analysis</i> illustrations	Excel
	<i>Gross Margin Variance Analysis</i> representative enterprise selection	Excel
	<i>Gross Margin Variance Analysis</i> template	Excel
	<i>Strategy Identification</i> guide	PDF
	Data requirements for <i>Identify Factors to Improve Viability</i> module	PDF
<b>Assess Sustainability</b>	<i>Financial Independence Assessment</i> guide	PDF
	<i>Operational Independence Assessment</i> guide	PDF
	<i>Returns on Capital Employed Analysis</i> guide	PDF
	<i>Returns on Capital Employed</i> template	Excel
	Data requirements for <i>Assess Sustainability</i> module	PDF
<b>Adaptation Guidelines</b>	Adaptation Guidelines for “Mason Enterprises”	PDF
	Adaptation Guidelines for “Hardware Store Enterprises”	PDF
<b>Interview Guides</b>	Sample Exploratory Research Interview Guide for Entrepreneurs	PDF
	Sample Exploratory Research Interview Guide for Demand Activators	PDF
	Sample In-Depth Research Interview Guide for Entrepreneurs	PDF

Note: [Enable macros](#) in MS-Excel; use MS Office 2016 Professional Plus Build 16.0.4639.1000 or higher to view chart(s) properly.



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