

RESEARCH BRIEF

Assessing the Sustainability of Latrine Business Owners



How sustainable are latrine businesses in Cambodia's rural sanitation market?

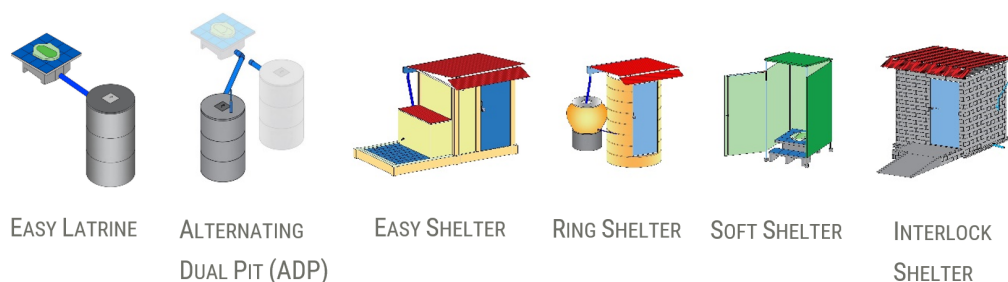
Context

Working with the private sector is key to accelerating the delivery of sustainable WASH services at scale and reaching Sustainable Development Goal 6. Through markets, communities can improve their livelihoods while making progress towards universal access to adequate and equitable sanitation and hygiene.¹ In rural Cambodia, in order to maintain and improve upon gains made in basic sanitation coverage, it is imperative to support sanitation businesses that sustainably provide WASH services and products.

Project Background

iDE's Sanitation Marketing Scale-Up (SMSU) Program in Cambodia has been building a network of high-performing sanitation enterprises for over 12 years. We began by talking with customers and latrine business owners (LBOs) to determine their interests and ambitions for sanitation. We continue to collect these insights to improve upon and design new WASH products that address customer and business needs, focusing on keeping them aspirational, affordable, and viable. The program trains local, small businesses to manufacture, deliver, and install these products. SMSU generates demand for these businesses and their sanitation products through our sales team who conduct door-to-door sales presentations in the villages where we work.

¹ [Guidance On Market-Based Sanitation. UNICEF. 2020.](#)



Over the past 12 years, iDE's SMSU program—in collaboration with the private sector—has sold and delivered over 383,730 sanitary latrines. In doing so, the program has supported a rise in rural sanitation coverage from 23% to nearly 80% in its seven operating provinces. In addition, LBOs have delivered and installed 9,767 latrine shelters and 13,652 Alternating Dual Pit (ADP) fecal sludge management upgrades. As SMSU continues to look to the future, a critical question must be asked: how sustainable are the enterprises that we have worked to support?

LBO Sustainability Study

In late 2020, iDE developed and conducted a survey to assess LBO sustainability. Sustainability was defined as: *the ability for an LBO to continue to sell and distribute WASH products without iDE's support* and was measured across three dimensions: *product diversity, revenue without iDE sales, and business capacity*.

The LBO Sustainability Survey was conducted with 69 of the 70 currently active LBOs and captures information on business acumen, access to professional networks, non-sanitation product sales, and business registration knowledge. A key consideration was also the financial stability of both the business and the household, as they are often one in the same. Data from the LBO Sustainability Survey was combined with sales data from iDE's Salesforce-based order management system. The data includes the period of July 1, 2018 to November 30, 2020, and represents the orders fulfilled by 109 LBOs, 70 of which are still working with iDE. Analysis of these two sources of data gave insights on the sustainability of LBOs and areas for growth in Cambodia's dynamic, rapidly maturing sanitation market.

Key Takeaways

Latrine businesses are generally successful but perform at varying levels

On average, SMSU project-connected LBOs earned 3.5 times more than an average rural Cambodian household income from WASH products.² However, LBOs vary widely in terms of business performance, scale of operation, and income generation as shown in Figure 1.

- Average monthly revenue of LBOs from WASH products was \$1,671 with the top quintile earning \$4,731 and the lowest quintile earning \$25.
- On average, LBOs sell 19.5 Easy Latrine products per month, with the top quintile of LBOs selling 51 latrines and the lowest quintile selling fewer than 1.

² The estimated total monthly income for a rural Cambodian household is 1.82 million KHR (447 USD). [Report of Cambodia Socio-Economic Survey 2019/20. National Institute of Statistics Ministry of Planning, December 2020.](#)

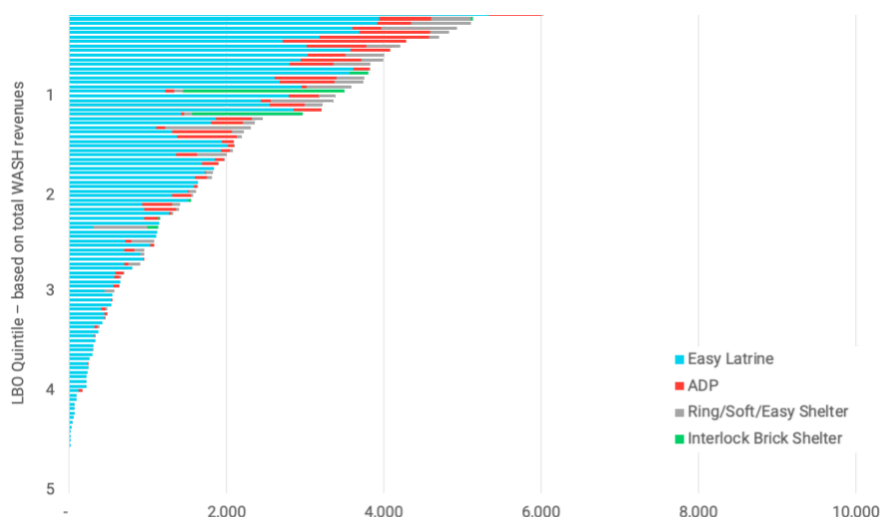


Figure 1: Monthly Revenue by LBO Quintile and Product Type

Diversification in WASH products can increase total revenue

As shown in Figure 2, LBOs who offer a larger diversity of products are more profitable overall. As the market for sanitation products and services matures and latrine pits start to fill, LBOs offering fecal sludge management solutions such as the ADP upgrade are more likely to stay profitable.

- Easy Latrines make up 65% of total monthly revenue for the top quintile of LBOs, 83% for the third quintile, and 100% for the lowest quintile.
- Of the 70 active LBOs, 19% are earning at least 30% of their WASH-product monthly revenue from sources other than the Easy Latrine.
- Of LBOs selling interlocking bricks, 60% are in the top earning quintile and the remaining 40% are in the second and third earning quintiles.
- Of the LBOs in the top earning quintile, 96% sell ADPs, in the second quintile 91% sell ADPs, and in the third and fourth quintiles, 41% sell ADPs. Notably, none of the LBOs in the lowest quintile sell ADPs.

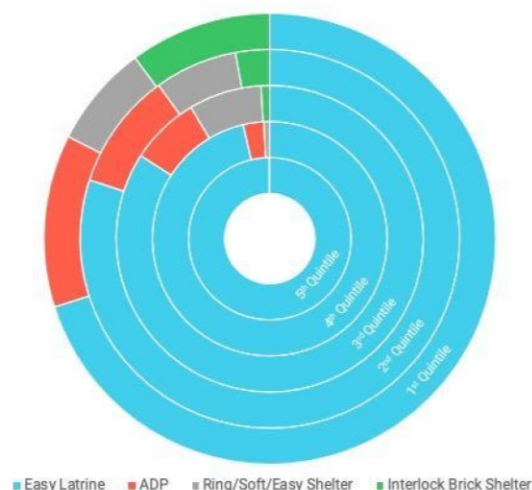


Figure 2: Percentage of LBO Monthly Revenue by LBO Quintile and Product Type

LBOs are diversifying their business models

Although most LBOs are reliant on iDE for the majority of their sanitation product sales, some have adopted more independent business and service models. LBOs are more likely to be sustainable when they invest in capital equipment (e.g. interlock brick making machines, delivery trucks, etc.), sell WASH products via direct retail channels, and offer other non-WASH products and services.

- 64% of active LBOs claimed to have earned at least \$1,000 in the last 12 months from non-WASH business channels while 23% claimed to have earned at least \$10,000 from non-WASH channels. The largest non-WASH business type for active LBOs was a hardware store where they can sell tools, followed closely by the sale of concrete rings and stilts, both of which are closely related to the production of latrine products.

- 15 of 70 LBOs earned more than 20% of their revenue from non-iDE channels. About 7% of all LBO WASH product sales come from non-iDE channels.
- 67 of 70 LBOs sold products via retail channels directly to households and 27% of LBOs sold more than 5% of their total quantity via retail channels.
- Ten LBOs have invested in a \$10,000 USD interlock brick making machinery as a capital investment for their business. Several of these LBOs have increased their customer base by selling interlocking bricks to other businesses.
- In July 2018, no LBOs were selling ADPs. By the end of 2020, 50 LBOs had sold and delivered more than 11,700 ADPs to households in need of fecal sludge management.

Developing latrine business capacity and acumen builds long-term success

Indicators of LBO sustainability are: creating social and financial infrastructure, incorporating family members in key roles, tracking finances, and business registration knowledge.

- The average monthly revenue from WASH product sales for LBOs with at least one family member giving low-level support is about \$1,600, while LBOs with at least one family member playing a key role earn, on average, over \$2,600.
- LBOs who track finances were more likely to report making “enough money” to suit their needs for 9 to 12 months of the year while those who do not track finances claim they are only making enough money for six months of the year.
- Three quarters of LBOs estimate having a business network of five to ten people including material suppliers, similar local businesses, and local authorities.
- Over 40% of LBOs are interested in and intend to register their business, which can enable them to access greater amounts of financing from lending institutions. However, significant barriers remain as 78% of LBOs have low or no understanding of the registration process.

Customized metrics can improve monitoring and evaluation of LBO sustainability

As a result of this analysis, key metrics for LBO sustainability were developed and are featured in the Quick-Look Metric Table. Using the five identified sustainability metrics, we can categorize LBOs and quickly see how sustainable or resilient they are across the three dimensions of LBO sustainability.

- Not one LBO satisfied all five metrics and only 4% of LBOs met four out of the five metrics.
- The largest group of LBOs (42%) satisfy two out of the five metrics.

Sustainability Dimension	Quick-Look Metric	% of Active LBOs
Product diversity	D1: More than 20% of iDE-generated WASH product revenue is from products other than the Easy Latrine.	42%
	D2: Self-reported annual revenues from non-WASH business channels exceed 25% of total revenue from iDE generated WASH sales, non iDE generated WASH sales and revenue from other sources.	15%
Revenue without iDE sales	R1: At least 5% of total product sales (Easy Latrines and ADP) are generated via non-iDE sales channels, including institutional sales or retail sales.	49%
Business Capacity	BC1: The LBO business is formally registered with a relevant ministry	10%
	BC2: The LBO engages members of family in at least one key role	76%

Conclusion & Wider Implications

In rural Cambodia, basic latrine coverage has reached 80% and latrine pits are starting to fill. In this context, sanitation businesses must consider how they can diversify their inventory and anticipate future demand for other products. LBOs who establish diverse revenue streams and connect directly with households, other organizations, and government projects, will be minimally affected by the eventual end of SMSU. Those who actively produce and sell products outside of iDE-generated sales channels are more likely to continue operating long-term as they can mitigate seasonally dependent demand and market fluctuations. Lastly, business capacity and acumen are key traits for sustainability. In formalizing their business, reinforcing their internal strengths, and ameliorating their business networks, LBOs can better weather the dynamic market.

While the findings of this study pertain to sanitation businesses in Cambodia, the lessons learned benefit the wider WASH sector engaging with the private market. It is evident that product diversity coupled with additional, non-NGO connected, revenue streams will bolster longevity and resiliency in a sanitation market. The most promising applications for building business capacity may be navigating the official government channels, augmenting social and familial networks, and improving internal financial accountability.

The events of 2020 have reinforced iDE's view on the critical need for LBO sustainability as an area of focus. With continued product innovation, business and marketing training, and improved linkages between LBOs and local governments, iDE aims to improve its progress with respect to the identified sustainability metrics over the remainder of SMSU program.

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