



Developing a Market-Based Approach

The role of market-based approaches, including sanitation marketing, in accelerating access to sanitation is increasingly recognised in the sector.

However, contexts in which the private sector is not well established and customers may be sparse present particular challenges. This practice brief outlines how supply chain strengthening initiatives, tailored to the rural Bhutanese context, have been developed as part of an integrated approach and highlights the lessons learnt in achieving the following:

- Creating access to information on technology options, associated costs and contact details of suppliers of sanitation related goods and services
- Creating access to packaged toilet products by encouraging the setting up of one-stop shops which include transportation services
- Creating access to skilled masonry services in areas where these skills have not generally been available or have been limited
- Encouraging and enabling retailers to provide credit services to their customers.

Introduction

Bhutan is a landlocked country in South Asia at the eastern end of the Himalayas. It is known for its development philosophy of Gross National Happiness. Predominantly rural, its 20 districts range from high altitude mountains to the borders of the Indian plains. The cost of doing business in these rural areas is considered high due to the geographic spread, transport issues, limited road access and difficult mountain terrain. At the same time, the extensive border with India and limited manufacturing capacity means the small number of



businesses must compete with a strong import market. Entrepreneurial interest in the local sanitation market is low.

The Rural Sanitation and Hygiene Programme (RSAHP) is the Royal Government of Bhutan's (RGOB) national programme. As part of the 11th Five Year Plan for 2013-18 the government has prioritised sanitation and hygiene as a key sector result area and is targeting an increase in rural access to improved sanitation and hygienic usage from 54%¹ to over 80%² through a nationwide scaling up of the RSAHP. SNV has been providing capacity development support to the Public Health Engineering Department (PHED) to develop the RSAHP approach since 2008. The programme has gone through stages of developing, testing, replicating and now scaling. It is based on SNV's Sustainable Sanitation and Hygiene for All (SSH4A) programme model.

What is SSH4A?

Sustainable Sanitation & Hygiene for All is SNV's comprehensive approach for supporting the delivery of districtwide rural sanitation and hygiene services. Developed since 2008 in Nepal, Bhutan, Cambodia, Vietnam and Laos with IRC, the SSH4A approach has now been implemented by SNV in rural communities in over 75 districts across 15 countries, contributing to progress in Asia and Africa. We focus on the development of capacities and approaches that can be scalable through a government-led districtwide approach. The SSH4A approach integrates best practice in sanitation demand creation, strengthening of sanitation supply chains, implementing hygiene behavioural change communication (BCC), governance and gender and social inclusion. It strengthens capacity of local stakeholders to develop their district or sub-district sanitation plans, bringing efforts together under the leadership of local government and defining inclusive strategies for achieving districtwide coverage for all in their area.

In Bhutan, the supply chain development component of the integrated model has been being developed since 2010 through a process of evidence based learning. Current supply chain activities were tested and adjusted in Pemagatshel district as part of a districtwide programme between 2011 and 2013 and were informed by a supply chain assessment. Direct engagement at district level enables the RSAHP to continue adapting the approach and to feed in learning and innovation to the national

scale-up while continuing to build capacity at the sub-national level in prioritised districts. By linking businesses to potential rural consumers, raising consumer awareness of product and service options and strengthening private sector capacity to supply desirable and affordable sanitation products and services the sanitation supply chain work has helped to increase demand for, and uptake of, improved sanitation facilities.

Figure 1: Supply chain activities as part of the integrated RSAHP programme cycle



Understanding Sanitation Supply and Demand

Supply chain studies were conducted with PHED in 2012 and 2014 to obtain a better understanding of consumer preferences, investment barriers and potential levels of demand for sanitation, as well as providing an overview of current supply chain actors, their key characteristics, product offerings and existing market constraints. The key findings are presented below.

Consumer preferences and demand	Market supply and constraints
<ul style="list-style-type: none">• Pour flush toilet is the preferred toilet due to its convenience in usage, cleanliness and comfort, irrespective of gender or toilet ownership.• Affordability is not the main barrier for most; rather toilets are not a purchase priority.• Every toilet is custom built and to save costs "everyone is a mason" which contributes to a wide variability in design and quality.• There is limited knowledge of different toilet options, material requirements and associated costs. For example, a pour flush toilet is perceived as costing USD 180 to 910 rather than the actual USD 55 to 180 (if self-constructed).• People want what their neighbours have, making exposure and experience strong drivers.	<ul style="list-style-type: none">• Rural supply chains exist, but not for sanitation products and services. Toilet components and materials move through completely separate and fragmented supply chains.• The purchase and construction process is very complex.• Despite the limited market size and logistical challenges, deep distribution channels exist in even the most remote villages, with a sophisticated system of formal and informal transportation linkages in place for moving goods and people.• Sanitary products and services are not considered a major business opportunity as they are seen as a one off purchase. There is little interest amongst entrepreneurs to enter the market.• Cement and imported sanitary hardware products are the main manufactured items that need to be purchased to construct a toilet. The other materials are sourced locally.• Businesses providing transportation services are critical supply chain actors.• Masons and carpenters provide construction services, although most households are also active in unskilled or semi-skilled construction work.

(References: Sanitation Supply Chain Analysis Pemagatshel District, 2012 and the National Sanitation Supply Chain Study, 2014, PHED and SNV Bhutan)

Strengthening the Sanitation Supply Chain

Based on the supply chain research and programme experience, the RSAHP developed approaches to strengthen the supply chain. Key considerations when designing the activities were scalability and sustainability and the timing with demand creation and behaviour change communication activities. The approaches focus on support for local SMEs and masons as principal actors interacting with household consumers. Efforts are made to facilitate rather than distort the market and enterprises are openly invited to participate without incentives or guarantees. The activities focus on improving product availability and simplifying the purchase

process, removing a range of market barriers so that households have:

- a simplified and more predictable procedure for ordering, paying and picking up sanitary products
- improved access to sanitation related products and services as well as price and purchase information through SMEs and masons
- improved access to technical advice and associated services to build high quality toilet facilities, including supporting householders who choose "Do It Yourself" (DIY).

Simplifying the purchase process

Building a toilet in a rural community can be a challenging issue for individual households as they are mostly custom-designed and custom-made. Knowledge is limited in terms of what technology option to choose, what materials to buy, where to buy these and how much it will cost. Purchasing all the materials is likely to be complex and time-consuming.

The product-packaging concept was introduced to streamline and simplify the toilet purchase process. The small number of SMEs with existing rural networks in the

programme areas are encouraged to offer packaged sets of toilet materials (such as the ceramic pan, syphon, pipe and elbow) for a single retail price including delivery services. This is done through a process of meetings in which examples of proof of concept from other districts are shared, along with information on the potential market opportunity. The business model operates like a one-stop shop, where multiple services are offered in one convenient location. Entrepreneurs find it easier to market their products and services as it has become much easier to communicate their product offering and prices to potential and new customers.



Packaged sets of latrine materials being delivered to a village by an SME

Improving access to technical advice and services

The programme also markets the available technical options, offers technical tips directly to customers and develops the capacity of masons and other entrepreneurs to provide better advice and services through targeted technical training. Linked to the demand-creation workshops, households who choose to self-construct have access to simple one-page DIY pictorial instructions for the three toilet models endorsed by the government. Origami toilet models are also used as visual aids. By incorporating technical advice sessions as part of the workshops

the households are better supported to make more informed decisions based on accurate information and knowledge. This also reduces dependency on skilled masons among households who already possess the required skills to construct these relatively simple toilets.

Additional practical training is provided in villages where skilled masons are less readily available. Through targeted mason training, the programme builds the skills of local masons, both men and women, in low-skill areas so that they are better equipped to offer technical advice and paid toilet construction services to households that do not have the skills to construct their own toilet.

Figure 2: The “Do It Yourself” installation guide



The following are the results from the district level phase:

Increase in access to improved and hygienic toilets

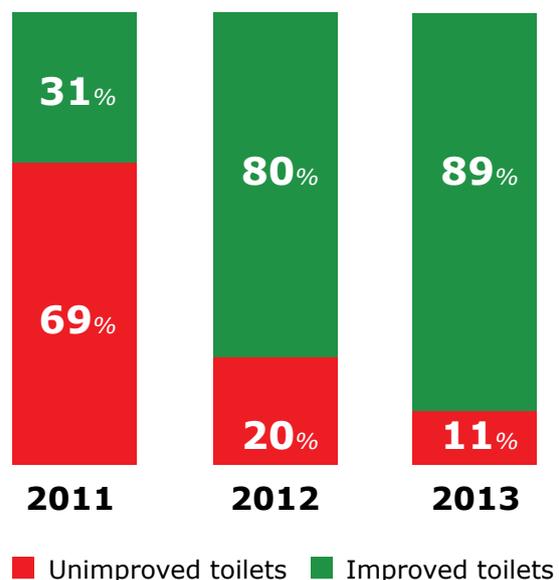
The results from the districtwide programme in Pemagatshel indicated an increase in access to improved sanitation facilities from 31% (2011) to 80% of households in 2012 and 89% in October 2013 (Figure 3). The majority of toilets assessed in 2012 were not only improved, but also environmentally safe (76% of all toilets), used hygienically (73%) and met hand washing benchmarks (65%) and all without hardware subsidy. A review by PHED in 2014 found that the district has progressed from having the lowest improved sanitation coverage prior to RSAHP to now having the highest access of the 20 districts nationally.

Over 90% of households invested in pour flush technologies

Households have made the most of the sanitation improvements by investing in pour flush toilets. Over 90% of all new toilets constructed during the 2011 to 2013 period were pour flush toilets, thus increasing ownership by 53%, from a baseline of 31% in 2011 to 84% in 2013 with 4% still under construction. The vast majority of these toilets were provided by RSAHP-engaged SMEs selling toilet

components and services. Based on programme evaluation criteria for sanitary conditions, hygienic usage and hand washing, these new facilities have made it easier to practice and use improved sanitation. The programme’s supply chain activities appear to have facilitated households to gain access to their preferred type of sanitation facilities.

Figure 3: Changes to sanitation coverage in Pemagatshel (2011 to 2013)



■ Unimproved toilets ■ Improved toilets

SMEs made gross sales revenue of Nu. 2,095,000

The programme actively engaged with six businesses with existing rural networks in the district. Of these, three responded by diversifying their business and making toilet products commercially available within the district. Previously, customers had to travel for six or more hours to the Indian border to purchase these goods. The fact that these SMEs were convinced to expand into the sanitation business in such a challenging market is a significant achievement in itself. Particularly when the programme did not offer any capital investment (seed grants, loans, subsidised inputs, etc.) or cover any direct costs associated with product sale and distribution.

Collectively, the three SMEs sold an estimated 1,400 toilet sets from the start of the district programme in 2011 until June 2013 which covers 43% of the total households in the district. Total gross sales revenue for toilet sets sold by the SMEs was 2,095,000 BTN (US\$38,200).

One of every four households hired programme-trained masons

An area of interest for the programme was the effectiveness of training masons. The programme trained a total of 65 masons (15 female and 50 male) in Pemagatshel. Monitoring conducted with 18 of the trained masons and households that used their services estimated that approximately 26% of households that purchased toilet sets hired a mason trained by the programme to construct their toilet. This corresponds to a previous assessment in Lhuentse district, which found that 28% of surveyed households had used mason construction services. The remaining households chose to construct the toilet either by themselves or hire local masons who had not received any training by the programme. Many of the trained masons reported to be engaged in providing (free) technical advice to other households. Using the trained masons was considered as offering householders better options, more informed choices and a better quality as compared to a self-constructed toilet.



Key Learnings

The approach taken in Bhutan to strengthen the sanitation supply chain has proven to be successful when developed keeping in mind the specific local context, challenges and opportunities. Some additional learnings are listed below:

- Given the prominent role of both national and local government as well as private sector actors, one of the main lessons for successful replication of the programme is to continue to support the collaborative and integrated approach while also institutionalising the core activities as summarised below.
- The process and approach, as well as the different roles required during implementation, need clear articulation, especially when the programme is replicated and scaled up in new districts.
- Engaging with private sector actors that already have a well-established rural distribution network, will greatly enhance the supply of materials to remote communities.
- The best way to get SMEs in new areas interested, motivated and convinced to become engaged in the sanitation business, is by sharing the programme's success stories from other areas as seeing is believing.
- Provide technical skills training prior to the demand-creation workshops and tailored to the needs of the individual districts.
- In the absence of product and service providers, consider engaging with relevant civil society organisations, particularly in a hard-to-reach villages, as alternative sanitation facilitators and suppliers.



Mason training to construct improved sanitation facilities in Pemagatshel

Institutionalising the government's role in the sanitation supply chain process

- **At national level:** The Public Health Engineering Division (PHED) of the Ministry of Health is responsible for developing the strategy, approaches, guidelines and supporting tools and for making these available to the district. Sanitation supply chain studies and pilot activities carried out at national level assist the programme (PHED) in developing national sanitation supply chain approaches and guidelines to scale up supply chain activities.
- **At district (sub-national) level:** The District Health Office is responsible for programme planning and budgeting and also for implementing the activities with support from the district engineering staff. The sanitation supply chain approach encourages districts leaders to take their own initiative, using the national sanitation supply chain tools and guidelines, which include clear roles and responsibilities. To streamline the process and save time, the approach uses formalised steps and tools for the districts to follow. The approach helps RSAHP staff to link communities and SMEs efficiently and effectively.

Moving forward

The RSAHP now works closely with the private sector, especially small and medium enterprises (SMEs) and service providers such as hardware stores and masons, to ensure the right products and services are available at the right time and at the right price to capitalise on newly created demand. The programme is currently operating in three districts (2014/16) where

recent experiences with the introduction of districtwide supply chain strengthening initiatives point to a number of success stories. Informed by a national supply chain study these have been documented as part of RSAHP Supply Chain Strengthening Guidelines³ and provide a set of promising strategies and approaches for the government to be scaled up nationwide as summarised on the next page.

Core activity	Brief description	When in the RSAHP cycle?
1. SME Inventory and Engagement	<ul style="list-style-type: none"> Inventory potential SMEs. Identified SMEs with a business proposition and encourage them to pursue the sanitation business opportunity. 	Before and during Inception Workshop & SME Workshop
2. SME-Community Linkages	<ul style="list-style-type: none"> Provide households with technical options and product features, prices and purchase process. Share details of demand creation activities with SMEs. 	Before, during and after demand creation triggering
3. Sales Coordination	<ul style="list-style-type: none"> Support SMEs and community members to manage order taking, payment transactions and deliveries. 	During demand creation workshop and follow-up
4. Technical Guidance and Services	<ul style="list-style-type: none"> Raise household awareness of technical options and provide technical advice. Identify technical needs and skills gaps. Support masons to provide technical advice and services to households. 	During demand creation and follow-up
5. SME Coaching and Monitoring	<ul style="list-style-type: none"> Provide business development services. Arrange business-to-business exchanges. Monitor overall sales and business performance. Monitor facility quality and consumer satisfaction. 	On-going, after Inception
6. Awareness Creation Events	<ul style="list-style-type: none"> Support SMEs and masons to promote their products and services at large community events. 	On-going, after Inception
7. Pro-poor support	<ul style="list-style-type: none"> Support SMEs to offer flexible financing. Support sub-district⁴ administrations to mobilise support for households identified as vulnerable. 	On-going, after Inception

Further Information and Key Documents

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<http://www.ircwash.org/projects/sustainable-sanitation-and-hygiene-all>

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1. The baseline of 54% is based on the National Statistics Bureau Bhutan Multiple Indicator Survey, 2010.

2. Gross National Happiness Commission 2012, Guidelines for the 11th Five Year Plan, RGoB, <http://www.gnhc.gov.bt/?s=11th+FYP>.

3. Bhutan Rural Sanitation Hygiene Programme Supply Chain Strengthening Guidelines available at http://www.snvworld.org/sites/www.snvworld.org/files/documents/bhutan_sanitation_supply_chain_strengthening_guidelines-final.pdf

4. A gewog refers to a group of villages in Bhutan at a sub-district level. Gewogs form a geographic administrative unit below dzongkhag districts.