



Vietnam, female masons in Dien Bien, 2011 – Photo Aidan Dockery/SNV

Why Rural Sanitation Supply Chains and Finance?

Access to sanitation is essential for human well-being, dignity and economic development. While demand creation innovations such as Community Led Total Sanitation are providing an unprecedented opportunity to start changing hygiene behaviour of rural people, evidence shows that behavioural change will not be sustained unless a number of key supporting conditions are met. One of these conditions is **access to affordable and appropriate sanitation hardware and services**.

Market-based sanitation solutions have the most potential for scale and sustainability. However, rural sanitation

markets are poorly developed and outreach is limited. Shops selling hardware and masons building toilets exist in any country, but the challenge is to reach many more customers across the socio-economic spectrum.

Particular attention is required to address the needs and preferences of different consumer segments, most notably special needs groups, households living in poverty, ethnic minorities and low caste groups. Because rural sanitation supply chains and finance often need to be strengthened, work should start in this area before and then be conducted in parallel to demand creation activities.

Sustainable Sanitation and Hygiene for All

This work on **Rural Sanitation Supply Chains and Finance** is part of the SNV/IRC **Sustainable Sanitation and Hygiene for All** programme, which aims to improve the health and quality of life of rural people in five Asian countries (**Bhutan, Cambodia, Laos, Nepal and Vietnam**) through enhanced access to improved sanitation and hygiene practices. It has four integrated technical components (see diagramme), strengthening local capacities for a rural sanitation service delivery with a district-wide approach. An additional cross-cutting regional component of the programme focusses on analysis, dissemination, and learning.

This Brief shares some of the lessons learned from working on the Rural Sanitation Supply Chains and Finance. It also introduces the thinking behind its design and its main activities.



The Role of Development Partners in Rural Sanitation

We recognise that sanitation is a human right and that states are the principle duty-bearers for a progressive realisation of that right in their countries.

Our contribution is to support national and local governments to find scalable, appropriate and feasible solutions for rural sanitation service delivery, and to improve performance.

Experience has shown that such solutions require the involvement of multiple stakeholders across the private and public sectors and civil society. We work to strengthen professional, organisational and institutional capacity of these stakeholders within their daily practice and within the context of a joint programme and impact targets. **The essence of the Sustainable Sanitation and Hygiene for All programme is capacity development.**

Understanding the Rural Sanitation Supply Chains and Finance component

The Rural Sanitation Supply Chains and Finance component aims to improve market functioning so that sanitation hardware and services are available for a variety of consumer needs and preferences and accessible to significantly more customers.

The component has a **systems perspective** looking at the roles of different actors and their performance. Sustainable and inclusive market-based solutions involve the private sector as well as public sector, though in distinct roles. It is

From the supply side, this involves exploring ways to: simplify the sanitation product to make it less expensive and more responsive to what consumers want; simplify the buying process; improve outreach; improve information and marketing; and engage with the right people and local enterprises with existing or future potential to put into practice sustainable business models for reaching the poorest consumers.

about improving products, services and capacity of the private sector but also about instruments for regulating and stimulating markets.

From the demand side, this involves having a better understanding of consumer demands, needs and aspirations, particularly the poorest households, women, and special needs groups. It means making sure an increased range of options and services are available, and facilitating genuine informed choice by households.

Market-based solutions also involve discussing **effective use of public funding in sanitation** with local governments with the aim to reach those households and communities where market access and product and service affordability remains most challenging. Appropriate methods of facilitating access to finance for both consumers and enterprises are examined, which link to pro-poor support mechanisms implemented through the governance component of the SSH4A programme.

Performance indicators

SNV and IRC believe in measuring performance as well as impact. Within the *Rural Sanitation Supply Chains and Finance* component the following performance indicators are measured:

- Increase in sales of sanitation hardware and/or paid services by SMEs in the last six months.
- Progress on female involvement in sanitation related enterprises.
- Skills development of SMEs engaged in sanitation related business and marketing activities.

Activities within the Rural Sanitation Supply Chains and Finance component

In the past two years, capacity building for Rural Sanitation Supply Chains and Finance was done within the following broad activities:

- **Sanitation supply chain analysis**, which aims to provide stakeholders with a deeper understanding of the rural sanitation market in their area, both in terms of constraints as well as opportunities for improvement.
- **Technology options and informed choice**, which builds local capacity for informed choice activities, adjusting and disseminating technological options and creating low-cost materials to support informed choice.
- **Small and medium-sized enterprise (SME) development**, which seeks to strengthen capacity of local private sector actors to engage or expand their businesses into rural sanitation.
- **Review and promotion of pro-poor support mechanisms** for rural sanitation at local level, which aims to support duty-bearers to identify and reduce disparities in access to sanitation.



We have learned that structure is as influential for inclusive market based solutions as private sector capacity. Still more can be done on consumer segmentation and improving market structure.

Sanitation Supply Chain Analysis

Sanitation supply chain analysis includes a review of consumer demands, needs and aspirations, as well as mapping the roles and activities of different actors in the supply chain. The analysis follows the value chain analysis methodology of [market access for the poor](#). Tools that are used include mapping, focus group discussions, interviews and surveys.

The analysis does not (yet) address the whole of the sanitation value chain including re-use: the focus is on hardware and services needed to construct and maintain toilets.

Over the past year we have learned that **significant time should be allocated for identification and mapping of the variety of providers**, many of whom do not engage exclusively in sanitation.

In the **Himalayan** countries, mechanisms for outreach are particularly important, while in the **Mekong** product price and quality are main bottlenecks.

More knowledge is also needed about how rural sanitation markets evolve. For example, in almost all cases we

Business models

Three 'business model' options were used to understand the market:

- The one-stop-shop model (providing all services)
- The micro-franchising model (where the business concept of one larger enterprise engages a number of people or small business to implement the idea at scale)
- The network model (where different SMEs coordinate and collaborate closely to provide the service)

These models proved a valuable conceptual framework for analysis and discussion about market structure. Of course, reality is more complex with many variations of the models observed.

observed an initial surge in demand. However, what is less clear is how demand for sanitation hardware and services develops over the longer-term, and which factors are most important in determining whether a sustainable market for private sector actors emerges.

Technology Options and Informed Choice



Laos pour-into-place toilet rings - Photo: Robert Deutsch/SNV

Toilet construction is a considerable investment in time and money for a rural household and toilet maintenance generally has labour and cost implications. This makes it essential to identify and adapt low cost options which are affordable and desirable to the poorest rural households and to create quality informed choice activities to help households make appropriate investment decisions.

First, this starts with clarity about the appropriate sanitation technology options for the area, and if some innovation is needed. This includes taking into account existing national standards and regulations for sanitary toilets. The second step often involves developing consistency of technology

options in consultation with government for all organisations working in the area, most often done in the form of a handbook. The third step concerns facilitators, who should have the skills and appropriate materials to guide informed choice with communities and households.

We have seen that innovation needs are area specific, but also that the required innovation tends to compromise small iterative steps. For example, in Bhutan it is about the use of stone masonry, while in Nepal the demand for pour-flush toilets from poorer households was attended through the introduction of locally made plastic 'pans'. Whereas in Laos, breakage during transport and low production capacity in the area motivated the introduction of village made toilet chambers and pour-in-place rings.

We also learned that simplified low-cost communication materials (such as A4 sheets) that providers and promoters easily photocopy and leave with households are essential for helping decision making, since often only one member of the household attends a meeting.

Also, while private sector engagement in marketing of toilet options is certainly useful, ensuring informed choice cannot be left entirely to the private sector, which sometimes favours more expensive options (and superstructures).

Furthermore, awareness of informed choice facilitators about maintenance aspects in relation to gender (e.g. when preference is pour-flush and women carry all the water), merits more attention.

It is important to make risk and investment on the part of small and medium enterprises a core part of the solution.

Small and Medium-sized Enterprise Development

Depending on the results of the supply chain analysis, activities in small and medium-sized enterprise (SME) development vary greatly and in practice go beyond SME development alone.

Many country teams promoted demand aggregation and better linkages between SMEs and consumers; and all countries worked with SMEs to improve their marketing and outreach mechanisms. For example, Cambodia used the model of village 'sales agents'¹, while Nepal experimented with the relationship between shops at district headquarters and village level 'outlets' through existing village shops. All countries explored micro-finance options for household investment, but only in Vietnam were savings groups used to access subsidies with an upfront investment. Laos is working on the set-up of financial services for SMEs.

Practically all countries did training of masons, but the impact was mixed. Interest and recruitment is key, not all trained masons see sanitation as a viable business or want to take risk to engage. Furthermore it was thought that greater visibility and involvement of women in the supply chain (as business owners, producers, masons, sales agents etc.) could improve communication with women in

households about sanitation options. In particular in Vietnam, training of female masons was successful where they are working as unskilled labour with masons and proved more interested in the local business opportunity in their own area. The female masons did not only provide construction services, but also advice to households on how to use and maintain the latrines.

Additionally, while there is a strong tendency to train selected SMEs, it is a point of debate whether SMEs should be selected or self-select for support. **The importance of making risk and investment on the part of SMEs a core part of the model** has been a key learning in Bhutan.

Other areas identified for review in future include professionalisation; producer aggregation; and the need for better monitoring and disaggregation of consumer groups, to see which additional instruments could be used to increase outreach.

In sum, we've learned that market-based solutions are not only about SME capacity, but also about market linkages, structure and incentives. More documentation will help to think out of the box.

Review and Promotion of Pro-Poor Support Mechanisms for Rural Sanitation

Geographical and social disparities in rural sanitation exist. The challenge is to achieve progress with equity. For this to happen it is necessary to recognise that some groups will need more and other types of support than the broader population. Simply promoting an unhygienic pit latrine for the lowest income quintiles is not considered progress with equity.

Support mechanisms can be financial or consist of in-kind support such as labour or tailored technical advice for special needs groups. Better tailored hygiene promotion or information, can also be part of support mechanisms.

Financial support for sanitation can include direct household subsidies in cash, materials or vouchers, as well as finance or credit channelled through communities or private sector. The decision on the type of support should be evidence based and discussed with local stakeholders taking into account effectiveness and transparency. Care should be taken not to distort market incentives.

We have learned that support mechanisms should be managed by the lowest level of government that is also reporting on progress. For example, from the experience in



Locally made toilet chamber in Savannakhet, Lao PDR
Photo: Robert Deutsch/SNV

1. Outreach model developed by IDE/WSP/USAID, (<http://www.youtube.com/watch?v=JRqGtiSfdXY>)

More knowledge is needed about how rural sanitation markets evolve over time after the initial surge following demand creation...

Nepal we have seen that a variety of existing local support mechanisms can be mobilised for sanitation, when local bodies and grassroots organisations in the area are held accountable for progress. Whereas in Bhutan, the most commonly required support is labour, which can be mobilised inside the communities if local administration and communities as a whole understand the collective benefits of sanitation.

In Cambodia subsidies are allocated and provided by local bodies (communes). Funding is sought externally. Additional efforts are made to communicate to the rest of

the households why these households are supported and that achieving complete coverage is essential for everybody's health.

With the exception of Vietnam, households in all countries considered taking up credit for toilet construction too risky and many of the poorer households were indebted already. In Vietnam a revolving fund managed by the Women's Union, helped households to access government subsidies. Upgrading options also need to be further explored as a method for enabling more accessible, albeit smaller, iterative improvements in sanitation quality.

Subsidies

In the SSH4A programme we believe that subsidies are simply one form of using public funding to enhance sanitation progress, and as such should be evaluated against other public investments for sanitation in a particular context (see also WSSCC's Public Funding for Sanitation 2009). Effectiveness, efficiency and the fact that sanitation is a public good, should all be considered.

We believe that it is unhelpful to be dogmatic about the use of subsidies, either in favour or against. The focus should be on making the best use of scarce public funding. This involves leveraging other investments where possible, transparency, targeting, the avoidance of perverse incentives, and so on.

Finally the justification for supporting some households and not others should be clearly communicated, and build on a local consensus.

Next Steps



Work on Supply Chains and Finance as well as on the other components of the Sustainable Sanitation and Hygiene for All programme will go on in all countries. Based on the review of last year, the team is now updating guidelines and looking for ways to improve mutual support among countries.

End monitoring of 2011 has shown that indeed more SME's are now engaged in rural sanitation business, sales have increased and SME's are providing a broader range of products. Outreach is still a challenge, as is female engagement in sanitation enterprises and services. Open defecation has reduced and improved sanitation has increased among households in programme areas, with a 100% coverage of basic sanitation in some sub districts. Whether this progress proves to be sustainable and whether the coverage of improved sanitation will continue to increase, is something that only can be seen next year. We are cautiously optimistic that a first step has been made towards market-based solutions for rural sanitation supply chains and finance, but we are also aware that there is still some way to go.

Sanitation is a human right, and States are the principle duty-bearer for a progressive realisation of that right in their country.

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Links

On the [IRC website for SSH4A](#), the following related resources can be found:

- The summary of the Dgroup discussion on Rural Sanitation Supply Chains and Finance (November 2010 - January 2011).
- Report of the Workshop on Rural Sanitation Supply Chains and Finance held in Dien Bien, Vietnam (January 2011).
- Photostory on Women Masons in Dien Bien.
- Handbooks on sanitation technology options by the different countries.
- Supply chain reports.

Progress Briefs can be found on the [SSH4A page on SNV website](#).



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