

Building Partnerships for Development In Water and Sanitation

David Schaub-Jones, August 2010
Building Partnerships for Development
www.bpdws.org

Sanitation - Just Another Business? **The crucial role of sanitation entrepreneurship and the need for outside engagement**

Poor sanitation has recently been identified by the World Health Organisation as the root cause of the majority of child deaths worldwide. Sadly though, progress on sanitation delivery currently lags well behind other Millennium Development Goals.

In developed countries sanitation is the role of the water utility. In developing countries however, the sanitation market is dominated by small private providers, usually very local in nature and often benefitting from little outside support.

As such, private sanitation providers, from retailers to masons, from public toilet operators to latrine emptying businesses, are of vital importance to medium- and lower-income communities. Unlike in the water sector, where there is much debate over private versus public provision, the key issue is how to combine a largely private relationship with an appropriate regulatory and supportive role from the public sector.

This article discusses the situation from the perspective of sanitation professionals, suggesting concrete ways to strengthen the urban sanitation market and thus accelerate progress towards a key pillar of human development.

Table of Contents

Introduction	1
What do Private Sanitation Providers Do?	2
Who do these providers reach?	4
Do private providers reach poor communities?	5
Why Engage with an Otherwise Private Transaction?	5
Expanding the sanitation market so that more people gain access	6
Encouraging sanitation markets to be more efficient	8
Reducing negative market externalities and harnessing positive ones	10
Who Currently Engages Sanitation Entrepreneurs?	11
Patterns of government engagement	11
Patterns of NGO engagement	12
SME support – patterns of engagement	13
Recommendations	15
Conclusions	16
References	17

© Practical Action Publishing, 2010. The definitive, peer-reviewed and edited version of this article is published in *Enterprise Development and Microfinance* Vol. 21 No. 3, pp.185-204(20). DOI: 10.3362/1755-1986.2010.017, ISSN: 1755-1978 (print) 1755-1986 (online). www.practicalactionpublishing.org

Building Partnerships for Development in Water and Sanitation (BPD) is a not-for-profit membership organisation that supports public, civil society and private sector decision-makers and practitioners engaged in partnerships that provide water and sanitation services in poor communities. Active since 1998, BPD focuses on how best to structure, manage and assess such multi-stakeholder collaborative arrangements.

Author: David Schaub-Jones

BPD Water and Sanitation
2nd floor, 47-49 Durham Street
London, SE11 5JD United Kingdom
Tel: +44 (0)20 7793 4557
Fax: +44 (0)20 7582 0962
info@bpdws.org ; www.bpdws.org
Co. Registration Number 4693224
Charity Reg. Number 110778

Introduction

In the United Kingdom, France and the United States, the job of providing sanitation to households lies with the water utility, which uses a network of sewers and treatment stations to collect dirty water and return it to the environment. In rural areas, where sewer networks can prove impractical, households revert to building their own septic tanks (these treat much of the liquid waste 'on-site' and are periodically cleaned out by large vacuum trucks).

In the developing world however the picture is often very different. Many secondary towns and cities have no sewer networks at all, and even bigger cities fare poorly. As the 2006 UN Human Development Report highlighted "much of Sub-Saharan Africa has low coverage by sewerage networks, with less than 10% of the urban population connected", whilst it suggested similar situations in Asia and Latin America (Watkins et al, 2006).

Here the vast majority of urban households – and almost all rural ones - depend upon 'on-site' sanitation. For some this means septic tanks built along similar lines to those in developed countries. But for far more this means a variety of household latrine, usually outside, and often shared between more than one household (in Africa, more than 40 percent of all urban households share their toilet facilities with other households) (Morella et al, 2008).

For many others basic sanitation remains a distant dream. Indeed a recent article in The Guardian newspaper suggested that it could take up to 300 years for 'sanitation for all' to become a reality (Boseley, 2010).

In such contexts, sanitation is typically viewed as the responsibility of the household to provide. To meet their needs (whether for building toilets or removing waste) households occasionally do-it-themselves and sometimes turn to public sector providers. Yet far more often they contract in the local private sector. These providers range from retailers that sell sanitation products, to the masons that build latrines, from entrepreneurs that running public toilets to firms that empty latrines.

Across the world then, millions of small private providers are active in the sanitation sector, providing a valuable service to many millions of households worldwide. Many are shoestring operations with few staff and resources. Others are more professionalised with long experience and significant capital invested. Amongst both groups exist many 'sanitation entrepreneurs', who seek to grow their business in a sustainable manner. Of the overall sanitation market, in most countries the private sector is the majority player - of vital importance particularly to medium- and lower-income communities. As such, unlike in the water sector, the debate about private versus public provision. The key issue is how to combine a largely private relationship (between providers and households) with an appropriate regulatory and supportive role from the public sector.

In some sectors there is an argument for leaving the informal sector, vibrant and dynamics as it is, well alone – interfering can do more harm than good. This argument does not hold for sanitation where some degree of public engagement is absolutely vital given the public health and environmental consequences of poor sanitation. As Dr Maria Neira, the WHO Director of Public Health and Environment, put it: *"Neglecting sanitation and drinking-water is a strike against progress. Without it, communities and countries will lose the battle against poverty and ill-health... Unsafe water, inadequate sanitation and the lack of hygiene claim the lives of an estimated 2.2 million children under the age of 5 every year. Of these*

deaths, 1.5 million are due to diarrhoea, the second leading contributor to the global burden of disease. The impact of diarrhoeal disease in children under 15 is greater than the combined impact of HIV and AIDS, malaria, and tuberculosis" (WHO, 2010).

Finding the right balance in such circumstances is never easy. In sanitation it is made all the harder due to large gaps in knowledge over several crucial issues. One is the nature of demand for sanitation goods and services amongst communities in developing countries. A second is around the market in which sanitation providers operate. This article discusses what is known by sanitation professionals, the links that need to be made outside the immediate sanitation sector and some of the outstanding issues to be tackled.

What do Private Sanitation Providers Do?

Urban sanitation is a complicated field. Within the overall sanitation market different sub-markets exist and the linkages between them vary from place to place. Consequently, the diversity of relationships (and sanitation 'transactions' that take place) is impressive. Providers of services range from the masons that build household latrines to the entrepreneurs that build and run toilet blocks, from manual pit-emptiers to privately-run vacuum trucks. Customers for these services are perhaps even more diverse, from pay-and-go users of toilet blocks to landlords letting out accommodation, from homemakers making home improvements to tenants emptying a shared latrine. Most sanitation transactions taking place in this context have little direct involvement of public authorities.

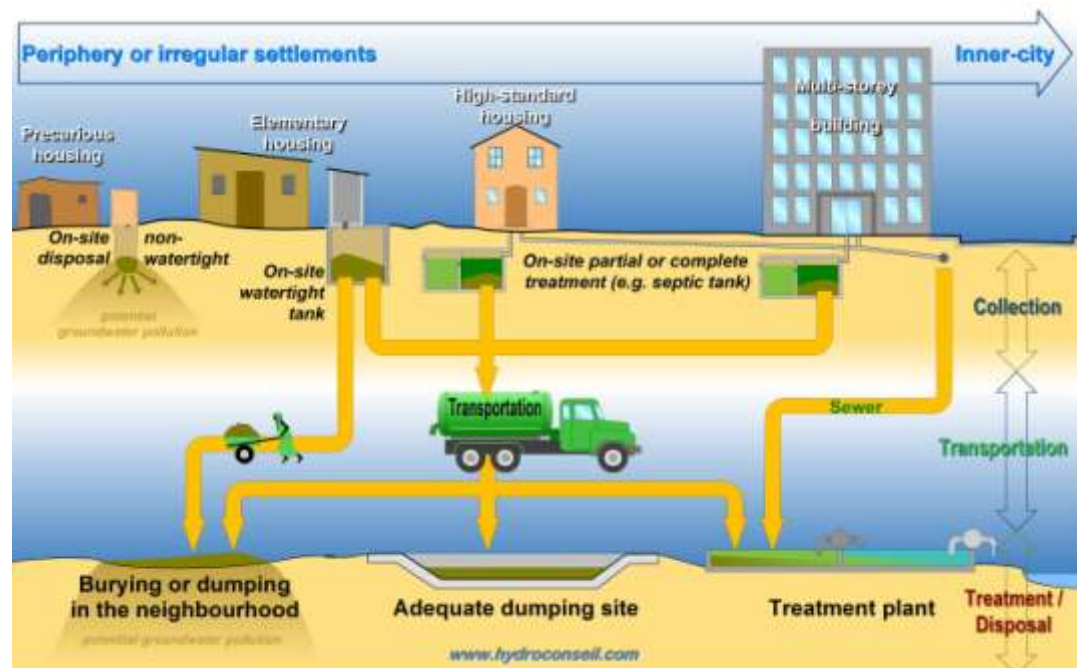


Figure 1: A stylised depiction of the sanitation 'waste' chain (© Hydroconseil)

The figure above depicts how the three principal sub-markets for sanitation interlink. There is a significant market for building the infrastructure which captures human waste (typically a toilet, and, for on-site sanitation some variety of storage). Where sewers are absent there is a further market for the removal and transportation of waste, once septic tanks and pits fill up. Finally there is a market for the dumping and treatment of waste (although this is largely the preserve of government authorities). Each of these sub-markets has quite different characteristics – together they can be considered the main

links in an 'urban sanitation chain' (a fourth market, where a different set of relationships apply, is the management of public toilets).

In 2009 Building Partnerships for Development in Water and Sanitation (BPD), an international NGO active in this sphere, held roundtable to debate engagement strategies for sanitation entrepreneurs. At this event the following market shares (indicative figures only) for each of these sub-markets were suggested.

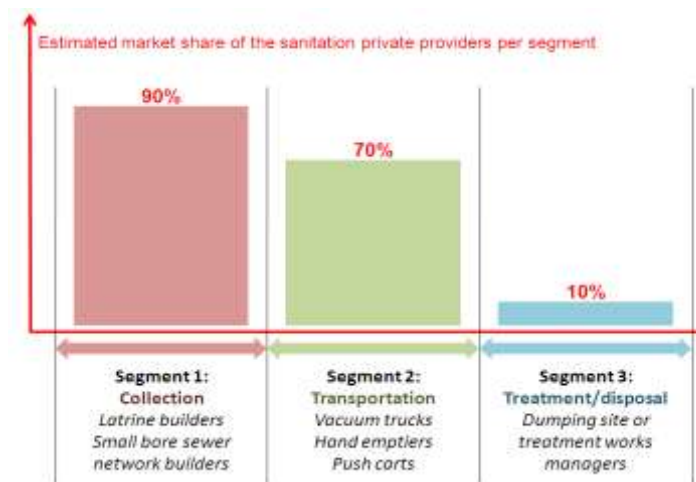


Figure 2: Estimated private / public market shares in different sanitation sub-markets

(Valfrey-Visser & Schaub-Jones, 2009)

While the actual distribution varies in each context, the basic message is clear – private providers are a key player both in building toilets (to collect human waste) and (where treatment does not happen in-situ) in transporting waste away from urban households. Waste treatment and disposal, where they happen, are conversely dominated by the public sector.

Products or services? Providers or entrepreneurs?

The sanitation market depicted above concerns that of sanitation services. It is crucial to make the distinction between providers that offer sanitation services (e.g. building latrines, emptying pits) and those that sell sanitation products (e.g. manufacture of plastic toilets, making soap). The business practices (and indeed business motivations) for each are quite distinct. This article focuses primarily on sanitation services, although it is clear that initiatives such 'sanitation marketing' (more below) influence both these markets and that they are interlinked.

It is also clear that not all the private providers active in sanitation can truly be considered 'entrepreneurs' in the sense of taking risks, being particularly innovative or able to invest much capital in their business. Although opinions vary, a standard dictionary definition is "a person who organizes, operates, and assumes the risk for a business venture" (The American Heritage Dictionary 2000). Key facets of entrepreneurship, along with risk-taking (whether in formal or informal activities) is that entrepreneurs' business is privately managed and financed and they seek to earn a financial return on their investment (whether this be their labour, their money or their expertise). Whilst the innovation, ability to grow and investment potential of 'true' entrepreneurs are interesting to the sanitation sector, all private providers, if harnessed properly, can arguably prove a powerful ally in extending services and contributing to the achievement of the Millennium Development Goals (MDGs).

Who do these providers reach?

A recent World Bank study on infrastructure coverage in Africa gives interesting insights into the patterns of access to sanitation in Africa. It also notes the importance of small providers in supplying this infrastructure.

Area	Open defecation	Traditional latrine	Improved latrine	Septic tank
Urban	8	51	14	25
Rural	41	51	5	2
National	34	52	9	10

Source: Morella, Foster, and Banerjee 2008.

Figure 3: Populations with access to sanitation in Africa (%)

The same report suggested that, in Africa, urban areas tended to follow three different patterns. The most common was where traditional latrines were in the majority. A second was where improved latrine versions (definitions vary, but basically these are permanent, odour and fly-proof and can accept some wastewater) were starting to outstrip the unimproved variety. A third was where the half used septic tanks and half used traditional latrines – and there was almost nothing in between. Yet the truth is that in most cities even sanitation professionals do not have a very good idea of who the clients for sanitation services actually are and in which income quintiles they lie.

What they do know is that different types of provider tend to work in different neighbourhoods. Take the transportation of waste for example. In Dakar there is thriving business for the mechanised emptying of latrines and septic tanks. Indeed this business – for household emptying along - is estimated to be larger than \$3 million USD a year (Bereziat, 2009). Yet it is not clear that these providers reach the poorest households, even where those households do have access to a toilet. In very dense urban and poor areas, part of the sludge removal and transportation activity is still undertaken by hand. Manual emptying – whilst widespread in Dakar as well as other African cities - is a difficult and fairly unpleasant business, but given technical and affordability constraints, is sometimes the only way that certain toilets can be emptied.



A vacuum truck at a dumping site managed by the Municipality of Dar es Salaam, Tanzania.

© Hydroconseil

Do private providers reach poor communities?

This is not an easy question to answer and the answer depends on where in the world you are talking about. What is known is that, where poor communities do have access to some variety of sanitation, it is as likely to be provided by private providers (or via self-provision) as it is by other providers, including the public sector and NGOs.

Depending on which sub-market one looks at, affordability certainly plays a role; the typical price for one mechanical ‘emptying’ of a pit latrine in Africa lies between 15 and 50 USD (in Dakar each trip was estimated to cost 50 USD) which is a considerable financial burden for many households and beyond the reach of the poorest (and average urban house must empty once every 6 – 24 months). This is part-explanation for the continued reliance on manual emptying.

In Cambodia a recent study on sanitation financing for the poor found that most public finance for sanitation in Cambodia is not reaching those below the poverty line. There the two largest sanitation marketing projects require households to contribute at least 30 USD in order to obtain a latrine – this being well above what willingness to pay studies had suggested poor households are willing and able to spend on a latrine (10 USD). A previous study in Cambodia suggested that many private latrine builders there offer facilities that are too costly (and too extravagant) for the majority of poor households – but also that communities were rarely aware that cheaper, more basic options are feasible (Salter, 2008) (Robinson, 2010).

The assumption is that the price charged by many formal providers lies beyond the reach of poorer households. This leads to a situation whereby the two poorest quintiles (the poorest 40%) are forced to rely on other, informal, service providers. For pit emptying this means a reliance on manual emptying even where mechanical emptying is feasible – partly as this is cheaper, partly as less quantity is removed (emptiers are paid by the bucket) – both of which better suit the disposable income pattern of many urban residents.

Yet the truth is that although there are many millions of private sanitation providers, the sanitation sector often does not have a good grasp, across any given town or city, of which households lie within which sanitation sub-markets and which households lie altogether outside the system.

Why Engage with an Otherwise Private Transaction?

The challenge for policymakers, as for many markets that involve ‘public goods’, is knowing where to draw the line between public provision, private initiative and regulation. On one hand the public sector wants to avoid its own service provision crowding out or dissuading useful private initiatives. On the other it wants to encourage the adoption of improved sanitation, regulate unsanitary behaviour that threatens public health and the environment and ensure that a basic human right is actually delivered. A tricky balance needs to be struck (and currently the patchy information surrounding on-site sanitation provision makes this hard to achieve). Nevertheless, there are three clear reasons for why outsiders should seek to proactively engage sanitation entrepreneurs. These are:

- To expand the sanitation market
- To encourage sanitation markets to be more efficient
- To reduce negative market externalities and harness positive externalities

Expanding the sanitation market so that more people gain access

Perhaps the principal challenge for urban sanitation is that a large, and often unknown, proportion of the population are outside the sanitation market entirely (using plastic bags as 'flying toilets', defecating in the open, or using rainwater to flush their pit toilets into nearby ditches). A key goal for public policy should be to enable these individuals to benefit, as do others, from sanitation markets. This is particularly true as the positive externalities of sanitation provision have been estimated such that 1 USD invested in sanitation in poor countries would yield more around 9 USD in productivity and health (and up to 34 USD in some countries) (Bartram et al, 2006).

Given the emphasis on household responsibility and the prevalence of private providers expanding the sanitation market effectively means increasing the market share of private sanitation providers – not at the top end of the income scale, but at the bottom. As mentioned, we know very little about the coverage of sanitation providers by income bands but can safely assume that this coverage declines as households become poorer. One option is to use public or charitable providers to reach those that the 'market', for whatever reason, leaves out. However given the experience of public provision at the top end of the market (those with sewers), and the mixed record of NGOs and CBOs at providing water to poor communities (arguably a simpler task), it seems unlikely to assume that they either will do a particularly good job (at any significant scale) of reaching the more marginalised members of society with sanitation. Advocating for an increased role for entrepreneurs in delivering public services could be viewed as contentious. The question of ability to pay arises, as does the responsibility of the public sector to provide a safety net for those who cannot help themselves. Yet unlike the water sector, sanitation entrepreneurs are rarely in 'competition' with public service providers, given public bodies' focus on sewerage. In most contexts they are overwhelmingly the majority provider – as such, engaging with them in order to expand coverage is largely a commonsense decision.

So, if getting households access to sanitation is a priority for the public sector and donors (as arguably it must be), we should be asking how to encourage sanitation providers to expand their activities down the income curve, moving gradually towards a form of "universal service"? To achieve this may require financial assistance from outside, and while such engagement is likely to be far from straightforward, it is perhaps the best way of building on existing assets and proven delivery mechanisms.

Recent interest in applying 'output-based aid' to sanitation is therefore pertinent. Output-based aid rewards contracted providers – whether public or private – on the basis of sustained and measurable outputs. An example of how this would apply to sanitation – in order to make mechanised pit emptying more affordable to poor households - is depicted in the figure below.

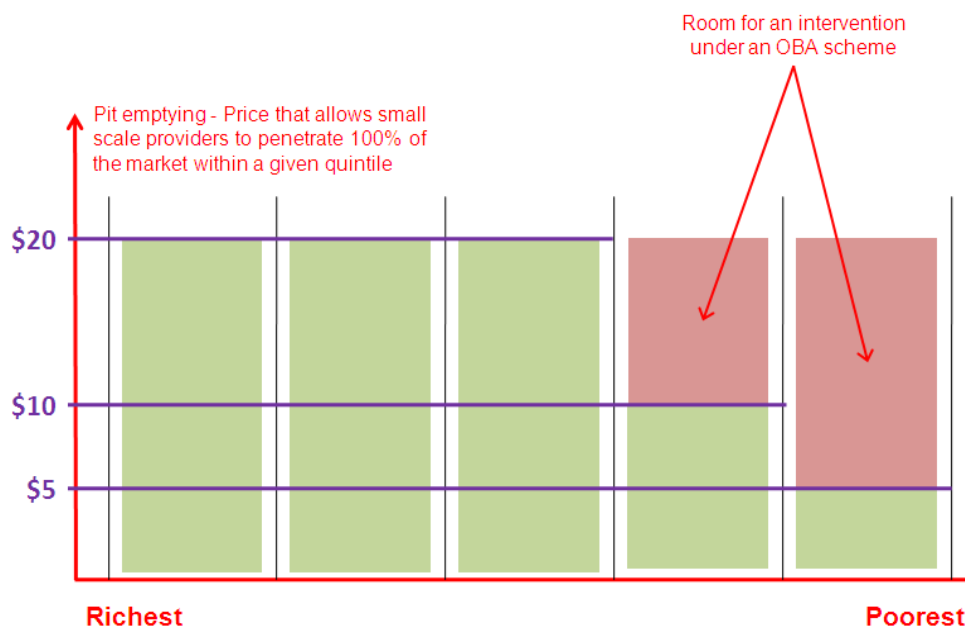


Figure 4: How output-based aid could narrow the gap between the providers’ offer (here assumed to be 20 USD) and the amount poorer quintiles can afford

Output-based aid tends to reward the provider directly and thus incite them to serve poorer communities. Another way of doing this could lie in increasing the purchasing power of poorer communities, through mechanisms such as savings clubs, vouchers and other conditional cash transfers. In Peru for instance, credit and revolving savings schemes have been applied with some success (the figure below shows which financial institutions have granted credit for sanitation improvements by householders, as part of a larger sanitation marketing scheme in that country) (Baskovich, 2009). In Vietnam the driving force has been the Vietnam Women’s Union (a grass-roots organization with 13 million members) that managed a Sanitation Revolving Fund (Tremolet, 2010).

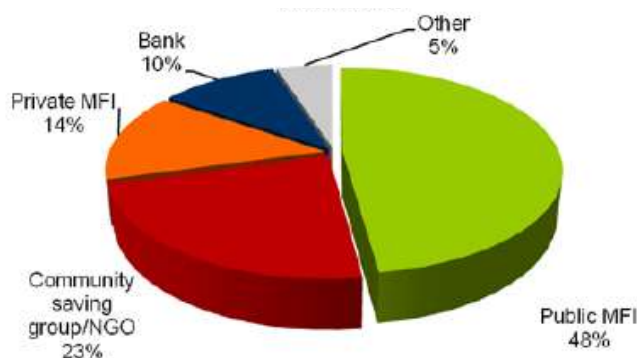


Figure 5: Source of credit made available for household sanitation investment in Peru

Both the cases of Peru and Vietnam above are linked to initiatives that describe themselves as ‘sanitation marketing’ – initiatives that seek to both boost sanitation demand and shaping sanitation supply. Sanitation marketing is based on the three-decade old field of social marketing, whose origins lie primarily in the health sector (where it has been applied to issues like anti-smoking campaigns). While social marketing (according to Wikipedia) is “the systematic application of marketing, along with other concepts and techniques, to achieve specific behavioral goals for a social good”, sanitation marketing is primarily about understanding why and how households adopt certain

hygiene behaviours and the triggers for (and barriers against) investing in sanitation infrastructure. Using this information, organisations (often NGOs) hope to better promote demand for sanitation and to influence the supply chain of sanitation goods and services so that more households 'adopt' improved sanitation (or good hygiene practices). To achieve its wider goals the approach is mixes 'social' – by promoting a social good – with 'private' – using private sector marketing techniques and the private sector to deliver goods and services.

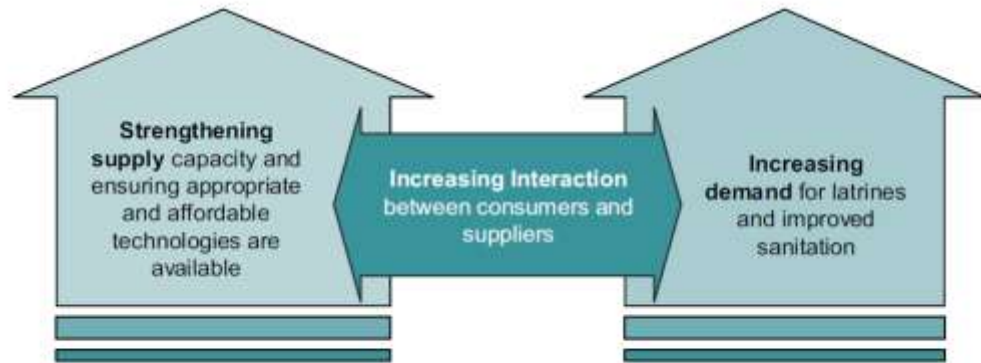


Figure 6: How WSP visualise Sanitation Marketing (Salter, 2008)

Using compulsion to promote the uptake of sanitation

Many countries have laws on their books that require households to provide for adequate sanitation. Yet these are widely flouted, even where they apply to landlords that are letting rooms or houses to short- and long-term tenants. Authorities in Burkina Faso have found another means of compelling householders to invest in sanitation. Apparently *"more than 90 percent of households in the town of Bobo Dioulasso ... have their own latrine as a direct result of the local administration's practice in the past of withdrawing rights of land tenure from owners who did not build a latrine on their plot within a specified time"* (Traore et al, 1994). The high coverage may well result from this pressure brought by local government. In theory this approach could work in reverse, with local governments awarding land tenure to households that do build latrines (although there are often complex reasons for why households lack land tenure in the first instance and problems more generally with forcing latrines on people). Indeed lack of land tenure may make it impossible to enforce existing legislation anyway. *"Much of the land on which the slums have been constructed (in Nairobi) is publicly owned. This means that landlords are not legally obliged to provide any services - which results in no latrines, water, electricity, and solid waste collection"* (Syagga et al, 2002).

Encouraging sanitation markets to be more efficient

The sanitation market is fragmented and suffers from various inefficiencies – both in how it is structured and inside the firms that operate within it. Accordingly those who wish to improve how the market operates are concerned both with making the market as a whole more efficient as well as making sanitation providers themselves stronger.

Donors are increasingly wont to view private sector development as *"crucial to economic growth and poverty reduction in developing countries"* (OECD, 2004). While there is some debate about how best to support the development of a vibrant private sector in developing countries, interventions tend to fall into one of three categories. At the macro level there are interventions to improve the overall investment climate by strengthening government policies and regulatory frameworks. At the meso level donor initiatives tend to improve the functioning of markets by intervening in the labour and capital markets at the national, regional or sectoral level. At the micro level private sector support tends

towards offers of business development services or firm-specific assistance (such as strengthening or reforming value chains) (Kurokawa et al, 2008).

This micro-level support, common in many other sectors, is often linked to growing already functioning businesses. Yet many stakeholders at BPD's 2009 roundtable focussed on the general absence of 'business support' that is offered to sanitation providers. Steps are being taken in Malawi and Kenya, Indonesia and Peru, to offer better banking services, as well as micro-finance, to sanitation providers. Advice on management methods and training in business services is also offered. But mainstreaming such assistance and scaling it up outside donor-programmes is proving a continuing challenge.

One of the challenges is that many businesses in the 'toilet-building' trade are small in scale and informal in nature. It is currently unclear how to help these providers move to scale and what the pros and cons of any 'aggregation' are. It would perhaps to know more about how existing entrepreneurs grow within the sector – something that is for now largely a mystery. Formalising existing businesses, through licensing or government procurement is often touted as step in this direction. Yet in Dakar, where BPD commissioned a case study looking at the vacuum tanker business (see box below) – it was clear that the more formal businesses – although larger - gravitate to government contracts and away from the household business (which are left to the smaller, less formal providers). Government contracts provided more stable income, more potential for scaling up and (we imagine) greater profitability. There is thus a real danger of support to make sanitation entrepreneurs 'better' running counter to the other objectives, such as boosting their presence in poorer communities. This is in keeping with the findings of the study on sanitation financing in Cambodia, mentioned above (where providers who were getting donor and government support were still offering latrines that cost 3 times as much as the poor were able to afford).

An insight into the market for mechanical emptying, Dakar, Senegal

"Most (household emptying) is done by informal firms who state a preference for the more predictable market offered by businesses and the State. Managers see household emptying as complicated to monitor; it is difficult for a manager to really know how many trips the truck did during the day (and they fear 'moonlighting' by their operators) ... entrepreneurs tend to concentrate on the ad-hoc contracts they receive for flood relief and tenders during pilgrimages (and prioritise this over) household emptying..."
Berezziat, 2009

Moving beyond assistance to individual firms, interventions to reshape the market are another way of making it more efficient. A good, and proven, example of how this can be done comes from Lesotho, which is justifiably famous for its highly effective urban sanitation programme, launched in 1981 through the Urban Sanitation Improvement Team (USIT). USIT was actively involved in assisting households who wanted to build or improve their dry toilets. As well as training and certifying builders, USIT provided a range of standardised designs suitable for different conditions and affordability levels, worked closely with retailers of building materials, and administered a loan scheme funded through the Lesotho Bank. By 1995, over 12,000 households in Maseru (a small town, whose population then was around 150 000 people) had installed VIP toilets as a result (Schaub-Jones, 2009).

Other ways to intervene in the market in this manner focus on linking up the various sub-markets. Examples of this have included designing latrines so that they can more easily be emptied, working with utilities to make it easier to accept and treat pit sludge at wastewater treatment stations, etc.

Reducing negative market externalities and harnessing positive ones

For obvious reasons policymakers are keen to regulate unsanitary behaviour that threatens public health and the environment. Beyond this, given the positive externalities associated with sanitation (mentioned above), they also want to encourage the adoption of improved sanitation and thus ensure that a basic human right is actually delivered. Yet left to their own devices, households and providers will tend to focus on their own needs and much of the public good – whether environmental protection or health improvements – risk going unattained.

The first priority of many governments is reducing the negative externalities that sanitation entrains. This leads to actions that are largely regulatory. For instance in poorly-regulated emptying markets there is a strong temptation for trucks (or manual emptiers) to dump their toxic load directly in the nearest creek, rather than go to the effort and expense of transporting it to the nearest treatment works (where often they must pay a fee for disposal). A system that uses licensing, regulation and the enforcement of penalties can limit such behaviour. Roping the general public into this sort of oversight (e.g. via hotlines painted to licensed trucks) can bring wider benefits too. In most developing countries the legal framework permits (or even obliges) governments to intervene in sanitation markets in order to protect the environment. However for many enforcement remains a perennial challenge, undermined by weak state capacity, general indifference and corruption.

For sanitation's positive externalities to be a reality, when it comes to on-site sanitation, given the domination of private providers, this effectively means the public sector and others 'piggybacking' public health objectives onto entrepreneurial activities. In Tanzania and Indonesia this has seen NGOs and government programmes trying to work with latrine builders to get them to pass on rudimentary health messages. Such activities can – when designed carefully - align the interests of entrepreneurs with policymakers (with hygiene education helping, under certain circumstances, to promote sanitation demand).

Yet working with entrepreneurs to harness the positive externalities of sanitation is not easy. For a start entrepreneurs like to shape their own activities and do not always welcome government intervention, however well-intentioned. Their skillsets and perspectives are not always in alignment with broader policy objectives. More mundane considerations may apply too. In Cambodia, for instance, surveys have shown that private sanitation suppliers make poor information conduits as they lack credibility amongst consumers (Salter, 2008). The recommendation there was to try to overcome the lack of trust through consumer marketing initiatives that endorse and raise the credibility of the suppliers (either by co-branding or otherwise associating them with trustworthy campaigns or through endorsement of the suppliers by credible information providers, such as health stations and physicians). Yet the truth is that the sanitation sector mostly has little experience of innovative engagement with sanitation providers that makes them 'agents of change' in this sense. If publically funded support to sanitation entrepreneurs is to become more widespread, it would be of great value to know more about whether and how this has achieved in other sectors (such as the solid waste, health or telecommunications sectors, all of which appear to have deeper experience of turning private initiative into public benefits).

Making linkages outside the sanitation sector

The solid waste sector has obvious parallels with sanitation. There is a lot of informal private sector activity, suggesting there is money circulating in the system. There is experience in getting entrepreneurs to bid on contracts where they still serve poor communities – in Dar es Salaam for instance, contracts for solid waste have been awarded to the local private sector, on the condition that they work with and through the informal sector (particularly in low-income neighbourhoods). But there are some differences. The business cycle for solid waste collection is much shorter than that for sanitation, making demand more predictable. There is also more political will – when existing collection systems break down the public notices and complains and politicians are motivated to act.

The contrast with the health sector is also instructive. For some years there was a concerted effort to bring in local entrepreneurs into the manufacturing side of the health business – for instance in making and selling bed nets. In this way the health sector hoped to harness the private sector to help combat malaria. If subsidy was used it was by giving vouchers to vulnerable groups in order to buy a net – the provider was still reimbursed the same value as a net sold. There seems to be much here that the sanitation sector could learn from.

Sanitation professionals should however not ignore some of the macro shifts in these sectors. In the health sector, the pendulum appears to have swung the other way and bed nets are increasingly given away free of charge. It seems arguments about rapidly expanding access by giving away nets (and therefore making rapid health gains) overcame discussions about establishing and maintaining financially self-sustained supply chains. Were decision-makers to become more convinced of the public good inherent in sanitation (as Lancet readers were in 2008 when they voted sanitation the most important medical advance in the last 150 years) and hence the need for state investment, larger scale public investment – for instance in appropriate sewer technologies – could feasibly drown out efforts to intervene in existing sanitation markets.

Who Currently Engages Sanitation Entrepreneurs?

This article has talked a lot about engaging sanitation providers. But as yet it has discussed little of who does this. In practice there are three major stakeholders that do (or could) intervene in sanitation markets: local government, water and sanitation NGOs and bodies that support Small and Medium Enterprise (SME) development.

Patterns of government engagement

With access to sanitation increasingly accepted as a basic human right, government clearly has a role to play. What is less clear is what exactly that role is (particularly given that households are currently putting much more money into sanitation improvements than governments are) (Banerjee et al, 2008).

In practice responsibility for sanitation tends to fall to local government – through both ‘environmental health officers’ and the waste management departments of local councils. The operation and maintenance of sewerage (if there is any) typically falls to the water utility (which is sometimes independent, sometimes a department of local government itself).

None of these groups tend to have great experience in supporting or engaging SMEs. Worse still, existing public sanitation investment is heavily biased in favour of sewerage over non-network forms of sanitation, despite many more people relying on the latter. Recent analysis of the World Bank’s operations confirmed the structural imbalance – less than half of the World Bank water and sanitation budget is spent on sanitation, and 71% of this is spent on sewers and wastewater treatment (Tremolet, 2008). Governments’ own budgets are often more lopsided still.

These two factors – inexperience and inappropriate financial allocations – tend to mean that sanitation providers are largely left to their own devices. Where the government

does feature is in setting regulations around waste dumping practices and (sometimes) technical standards regarding toilets. Yet the practical application of these regulations remains a challenge in many contexts.

Local entrepreneurs mentored by a local municipality, Durban, South Africa

One example where local government are 'grasping the nettle' is in Durban, South Africa. There the municipality has developed a sanitation management programme that mentors local entrepreneurs. In doing so it develops a close partnership between the city municipality, the entrepreneurs that run emptying and transfer as a business and the local communities. The scheme uses a mix of manual and mechanical emptying to clear waste out of poor urban communities and into the formal sewer and treatment system. For more see <http://bit.ly/bvUfDk> (Eales, 2005).

The Total Sanitation and Sanitation Marketing project in Indonesia is another example of this, where government is engaging heavily in the sanitation sector, but relying on private enterprise to actually deliver sanitation to households. There outside intervention focusses on a few key concerns: the need to develop 'intermediate' latrine options that are cheap to start with but can be upgraded over time; the power of government to communicate the desirability and availability of such products (and thus support entrepreneurs' own marketing); boosting faith in masons and other sellers through reputable 'branding' scheme; encouraging 'one-stop services' that allow communities and entrepreneurs collective bargaining power.

Globally however, initiatives such as this in Indonesia (and similar sanitation marketing efforts in Peru, Cambodia and Vietnam) remain the exception – most local governments rarely engage directly with sanitation entrepreneurs in order to support and encourage them (rather than regulate and control them).

Patterns of NGO engagement

In urban settings, but more in rural ones, NGOs are quite active in sanitation. Their activity tends to focus at one end of the sanitation supply chain – around building toilets - and around hygiene education and demand promotion.

On one hand, these activities can strengthen urban sanitation markets and thus support sanitation entrepreneurs. Demand creation in particular helps local sanitation businesses. Yet on the other hand, many NGO programmes actually undermine existing private initiative, particularly through their subsidising of toilet building programmes. These skew the market and change the incentives facing households – many of whom have proven ready to 'wait' for a subsidised toilet rather than engage private entrepreneurs to build one at market rates.

Some NGOs, recognising the advantages of existing and robust sanitation markets, are more proactive however. These NGOs work directly with entrepreneurs to help strengthen their business models and assist them to scale up their activities. Some are still bringing in subsidies, but doing it in such a way as to minimise market distortions. IDE in Vietnam is a good example of an NGO that has done this at scale – between 2003-2006 – enlisting community health workers, the Vietnam Women's Union (a grass-roots organization with some 13 million members) and village heads to promote sanitation among households. The NGO also trained masons and small businesses on how to build and sell improved technology options. As a result over 15,000 of the 54,000 households targeted built safe toilets during the three-year period. More recent work has gone back to Vietnam to explore the legacy of IDE's intervention and finds that in the three years since the IDE pilot project ended, communes have sustained increases in

access to sanitary toilets and that sanitation providers have seen a steady demand for their products and services after the project finished (Sijbesma et al, 2010).

Other NGOs are looking to support the creation and development of associations of private operators. Such associations can play a positive role - such as in Uganda where the association acts as a safety net, an informal lending pool and provides hospitalisation cover for sanitation entrepreneurs. Yet the truth is that the role of professional associations in the sanitation sector is not particularly well understood. More information on how such institutions function, what their impact (negative or positive) is on prices and quality of service would be helpful to sector professionals.

In South Asia particularly, NGOs are becoming an important player in community-run public toilets – sometimes building these on contract to local municipalities. In doing so they are blurring some of the boundaries between non-profit and profit-driven enterprises. They are also bringing communities in as a direct actor in building and running sanitation infrastructure, which is an interesting development, less seen in Africa (where public or private management of such blocks is the norm).

SME support – patterns of engagement

Until recently there has been little engagement from bodies traditionally associated with supporting SMEs (whether these are purely commercial such as commercial banks, or other, such as NGOs offering business development services, microfinance etc.). At the 2009 roundtable a consensus emerged that the sanitation sector needs to better involve professionals who build / support entrepreneurs for a living. Other sanitation sector discussions have drawn similar conclusions. The merits of looking to banks and other financiers to support entrepreneurs active in sanitation (rather than rely on NGOs) have been discussed and, slowly, bridges are being built to this community. The availability and inclination of micro-finance experts, business planners and social marketers to get involved in sanitation has been debated at some length – although in practice this remains to be tested at any scale (at least in Africa).

To date it appears that most sanitation providers are self-financed – although efforts are being made in Peru (see lending patterns above, where 25% of lending to households for sanitation comes from commercial organisations) and in Asia to get commercial financing to them. Globally a body calling itself the World Sanitation Financing Facility has been set up, in order to try and bring ‘green investment’ into the sanitation sector. The Acumen Fund, a noted supporter of entrepreneurship in developing countries, has recently suggested it is keen to engage with sanitation entrepreneurs in a similar way it has those in water and other sectors.

In Indonesia sanitation entrepreneurs are partnering with informal savings groups (called arisans in Indonesia) and local micro-credit institutions to enable customers to pay by installments. This alleviates a common constraint faced by households identified through research: lack of cash due to competing priorities. Arisan groups have made agreements with local suppliers of sanitation goods to get supplies on credit (Mukherjee, 2009).

Despite these promising beginnings, for commercial institutions to get more fully involved it is likely however that the market needs to become more alluring (as well as being better understood and communicated). In Malawi one way this is being attempted is by linking sanitation provision with the re-use of waste to enhance financial returns (e.g. turning waste into compost and by selling this to households and organic farms,

boost returns on investment). The potential to target loans to agricultural businesses and fertiliser producers to encourage more direct engagement with entrepreneurs is also being explored.

Indeed support can be more than just financial in nature. In Japan SME support centres are widespread: JICA – the Japanese aid agency – is looking to transfer aspects of this model to developing countries (as, in similar fashions, are GTZ and UNIDO) (Kurokawa et al, 2008). A stylised version of how SMEs are supported, in the agriculture sector, in Japan is found below – a version of this was suggested to BPD’s roundtable on engaging sanitation entrepreneurs and considered to have much merit.

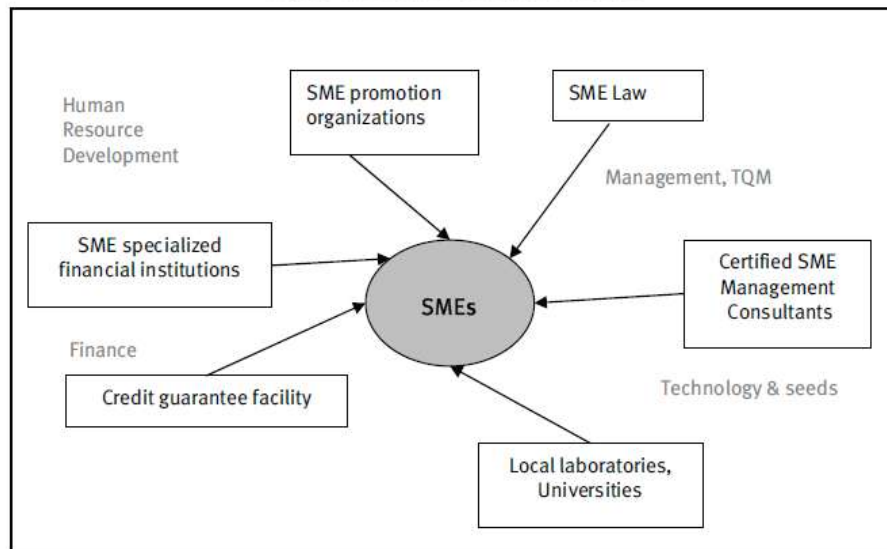


Figure 7: The web of Business Development Services (BDS) available to SMEs in Japan (Kurokawa et al, 2008)

Proponents of sanitation marketing are increasingly leaning in this direction too, seeing the need to strengthen supply even as demand for sanitation is boosted. The EU recently launched a significant call for research proposals whose major objective is “to contribute to the understanding and implementation at scale of sustainable sanitation service chains in low-income urban areas in Sub-Saharan Africa” – the sort of support featured above is a crucial part of doing just that (see <http://www.splash-era.net/sanitation-call/index.php> for more).

For commercial institutions and business development service (BDS) providers to get more fully involved it is likely however that the market needs to become more alluring (as well as being better understood and communicated). In Malawi one way this is being attempted is by linking sanitation provision with the re-use of waste to enhance financial returns (e.g. turning waste into compost and by selling this to households and organic farms, boost returns on investment). The potential to target loans to agricultural businesses and fertiliser producers to encourage more direct engagement with entrepreneurs is also being explored. Other routes should also be explored.

Recommendations

In the last decade the thorny problem of why demand for sanitation – from governments and from households – is not higher, despite its demonstrable benefits, has started to be addressed. We now understand better what drives households to invest in improved sanitation and what barriers they face. We have a better understanding of how sanitation's institutional fragmentation undermines government resolve and action.

Consequently the issue of who actually supplies sanitation goods and services has been overshadowed. It is now rising up the agenda, partly prompted by a realisation that prompting demand without supply is not progress, and partly due to developments in other sectors such as health, water and solid waste where the importance of supply chains has gained recognition.

Yet for widespread and efficient support to sanitation providers to become a reality, several issues need to be addressed. For instance:

- Quantitative data is badly needed – household surveys and provider interviews in selected settings would greatly boost understanding of the financial flows involved in urban sanitation. This will help in designing subsidy programmes, but also help bring in needed outside parties (such as those offering business development services (BDS) in developing countries).
- Although sanitation entrepreneurs are numerous, regulatory frameworks and mechanisms tend to assume that sanitation is provided by a state utility. There is little guidance on how regulatory frameworks (policies, by-laws, standards, strategic planning) can support the activities of independent sanitation providers. Ways to adapt regulatory frameworks to the actual reality of independent sanitation provision need to be found.
- It is not easy to create productive spaces where policymakers and providers can discuss issues of common concern. Several challenges exist, including informal business practices, diluted institutional responsibilities, a lack of political will and stigma associated with sanitation. Yet productive dialogue between the public and private sector is fundamental to the creation of partnerships and markets that are inclusive and innovative. Lessons from where dialogue has flourished need to be shared with donors, NGOs and governments elsewhere.
- The sanitation sector needs to learn from experience both within and outside the sector around the smart use of public funds to improve private sector service delivery. How can sanitation entrepreneurs be incentivised to provide services to poor people or to protect the environment if the existing market does not push in these directions?
- We have a poor understanding of how robust sanitation businesses are and whether they have the capacity and ambition to grow. Researchers could usefully explore what support sanitation providers really need: training, access to credit, technical advice? What inspiration from other sectors can the sanitation sector glean?

- Informed intervention is difficult without knowing more about what brings sanitation entrepreneurs into the market to begin with. Is sanitation seen as a business opportunity as of itself, or merely an extension of other activities? Does it depend on family or professional ties? What impact does stigma attached to sanitation have on the development of the sanitation market? What role do barriers to entry as well as barriers to exit play in defining the market?

Conclusions

Across the world strenuous efforts are being made to lift sanitation up the agenda of governments, donors and households themselves. Progress is being made. Yet sanitation is currently lagging well behind the targets set in the Millennium Development Goals and while there are successful initiatives being scaled up, many of these are rural in nature and involve very basic 'solutions'. In order to maintain momentum and impact urban settings too, other approaches will be needed.

These approaches should take into account that the majority of the sanitation supply chain is the preserve of small private providers - usually very local in nature and often benefitting from little outside support. With interest in social entrepreneurship and the 'bottom of the pyramid' rising, the sanitation sector should be well placed to capitalise on one of its hidden strengths.

The good news is that private sanitation providers have proven resilient and are certainly numerous. The bad news is that they tend to be poorly understood and remain 'out of the limelight'. It would not take much effort to remedy this situation. Doing so would catalyse change that would grow the economy and create jobs, protect the health of millions (in particular, children), preserve the environment for future generations and deliver a basic human right.

References

- Bartram, J, Haller, L & Hutton, G (2006) *Economic and Health Effects of Increasing Low-Cost Water and Sanitation Interventions*. Geneva: World Health Organization
- Baskovich, M (2009) *Creating Sanitation Markets – a Powerpoint Presentation*. WSP, www.perusan.org
- Bereziat, E (2009) *Engaging Sanitation Entrepreneurs, Dakar Case Study*. BPD
- Boseley, S (2010) *Sanitation for all - but not for another 300 years*. The Guardian Newspaper, London, UK. 21 April 2010.
- Eales, K, (2005) *Bringing pit emptying out of the darkness: A comparison of approaches in Durban, South Africa, and Kibera, Kenya*. BPD
- Kurokawa, K, Tembo, F & te Velde, D.W. (2008) *Donor support to private sector development in sub-Saharan Africa - Understanding the Japanese OVOP programme. Working Paper 290*. ODI
- Morella, E, Foster, V & Banerjee, S (2008) *Climbing the Ladder: The State of Sanitation in Sub-Saharan Africa*. Background Paper 13, Africa Infrastructure Country Diagnostic, World Bank, Washington, DC
- Mukherjee, N (2009) *Total Sanitation and Sanitation Marketing Project: Indonesia Country Update*. WSP
- OECD (2004) *Accelerating Pro-Poor Growth through support for Private Sector Development*. OECD DAC Network on Poverty Reduction
- Robinson, A (2010) *Sanitation Finance in Rural Cambodia: Review and Recommendations*, WSP & ADB
- Salter, D (2008) *Identifying Constraints to Increasing Sanitation Coverage Sanitation Demand and Supply in Cambodia*, WSP
- Schaub-Jones, D (2009) *Supporting sanitation entrepreneurs in Lesotho – 20 years of experience*. BPD
- Sijbesma, C, Xuan Truong, T & Devine, J (2010) *Case Study on Sustainability of Rural Sanitation Marketing in Vietnam*. WSP
- Syagga, P, Mitullah, W & Karirah, S (2002) *A Rapid Economic Appraisal of Rents in Slums and Informal Settlements*. Government of Kenya & UN-Habitat
- Traoré, E et al (1994) “*Child Defecation Behaviour, Stool Disposal Practices, and Childhood Diarrhea in Burkina Faso: Results from a Case-Control Study*.” *Journal of Epidemiology and Community Health* 48 (3): 270–75
- Tremolet, S (2010) *Financing On-Site Sanitation for the Poor: A Six Country Comparative Review and Analysis*. WSP
- UN-Water, WHO (2010) *GLAAS 2010: UN-Water Global Annual Assessment of Drinking Water and Sanitation - Targeting Resources for Better Results*. WHO
- Valfrey-Visser, B & Schaub-Jones, D (2009) *Engaging sanitation entrepreneurs: Supporting private entrepreneurs to deliver public goods*. BPD
- Watkins, K et al (2006) *Human development report 2006 : beyond scarcity : power, poverty and the global water wars*. UNDP



BPD Water and Sanitation
2nd floor, 47-49 Durham Street
London, SE11 5JD UK
Tel: +44 (0)20 7793 4557
info@bpdws.org | www.bpdws.org
twitter.com/bpdws | facebook.com/bpdws