sustainable sanitation alliance

SuSanA factsheet

Sanitation as a business

April 2012

1 Summary

This factsheet discusses the role of different players in the sanitation sector, such as private businesses, governmental institutions and the non-profit sector with a focus on developing countries. Several project examples illustrate activities that can create revenues for investors and local entrepreneurs but also highlight some of the challenges in delivering sustainable sanitation services to the poor.

The key messages of this factsheet are:

1. Experiences worldwide show that sanitation can be a viable business opportunity, and has the potential to provide multiple benefits to the poor. Market-based approaches seek to address the challenges of financial sustainability and to strengthen the role of the private business sector while empowering local communities and individuals to make their own informed decisions about obtaining sanitation products and services.
2. The challenge is still to identify effective, scalable, and sustainable sanitation solutions with economic potential and to allocate investment capital and funding to implement these solutions on a large scale.
3. The process of identifying these solutions needs to be a collaborative effort between experts in marketing, design and engineering, which can be effectively supported by national and local governmental agencies as well as NGOs with in-depth local knowledge.

This factsheet's target audience includes entrepreneurs, policy-makers, researchers and programme managers. It should be read together with the SuSanA factsheet on "Public awareness raising and sanitation marketing"[1]. Both factsheets are products of the SuSanA Working Group 9 on sanitation as a business and public awareness.

2 Introduction

Considering the sanitation sector as a marketplace full of business opportunities, is not a new concept. The private sector – be it internationally operating large scale enterprises, social entrepreneurial programmes or small and micro-scale businesses of masons, plumbers, cleaners, emptiers or wholesalers – has often been ignored as a reliable alternative or addition to public service providers in the sanitation sector.

As a result, particularly developing countries face major challenges in the delivery of safe sanitation products and services, which impacts most heavily on the economically poorer inhabitants.

Prior to the emergence of business models in sanitation, most traditional approaches to sanitation development have been based on subsidy driven infrastructure-focused programmes. For example: free or heavily subsidised toilets are built often with volunteer labour and imported hardware. These models "have poor records in effectiveness of use, efficiency of investments, sustainability of services, and scaling up access" (Frias and Mukherjee, 2005).

Furthermore, the sustainable impact of donor-driven sanitation models is challenged by many influential actors in the sanitation sector such as Jack Sim, social entrepreneur and founder of the World Toilet Organization (WTO) based in Singapore. He asserts that the "donor model" does not work on a large scale since "it lacks the sustainability and continuity that comes from mobilising a community to produce, market, sell, distribute and maintain their own sanitation products"[2].

Figure 1: A man selling concrete slabs in Lilongwe, Malawi (source: L. Kappauf, 2011).

In 2005 the paradigm shift from beneficiary to "potential costumer" was backed by the publication "The Fortune at the Bottom of the Pyramid" (Prahalad, 2005), which identified the base of the world's economic pyramid[3] that includes four billion people living on EUR 5.50 or less a day as a market.

[1] http://susana.org/lang-en/library?view=ccbktyp eitem&type=2&id=749

[2] In 2010 WTO received an urban innovation grant to help solve global sanitation problems: http://press.abc-directory.com/press/5779

[3] Base of the pyramid (BOP) is used synonymously with Bottom of the pyramid.

Prahalad (2005) analysed the spending potential of the world's poor as consumers and the power of business models to generate income and sustainable solutions to alleviate poverty at the bottom of the pyramid. Hammond et al. (2007) argue that the BOP constitutes a EUR 3.5 trillion[4] global consumer market which reveals "significant opportunities for more inclusive market-based approaches that can better meet the needs of those in the BOP, increase their productivity and incomes, and empower their entry into the formal economy" (Hammond et al., 2007).

Based on this context, there is now a growing willingness of all actors in the sector (such as national and local governmental agencies, NGOs, service providers and private sector organisations) to search for innovative approaches to promote, finance and support business models for sustainable sanitation.

3 Market-based approaches

Market-based approaches to sanitation seek to address the challenge of financial sustainability, while empowering a local community and individuals to make their own decisions about obtaining sanitation products and services and strengthening the role of the local private sector. Sanitation is then seen as a vehicle for businesses to provide services and earn revenues that can be reinvested to keep expanding coverage of sanitation facilities and to develop economic activity while improving peoples' living conditions.

Studies show that each Euro invested in improving access to water and sanitation[5] in developing countries is estimated to give a return of 5 to 12 EUR (Hutton et al. 2007). Moreover Hutton et al. (2007) estimated an additional benefit of 310 million working days per year for the total working population aged 15-59 years that would be gained by achieving the Millennium Development Goal on water and sanitation. These economic benefits should convince governmental agencies to invest in sanitation, create clear policies for sanitation supply and maintenance and to work with the local private sector.

The most effective anti-poverty measures are those that create sustainable and self-perpetuating local jobs. This could for instance be achieved by targeted investments in the sanitation sector in developing countries involving social entrepreneurs connecting investors with micro-entrepreneurs to serve the local market's sanitation needs. The sectors of energy (e.g. see Ashoka/HYSTRA, 2009) or telecommunication[6] could be seen as promising examples in which business opportunities within the base of the pyramid have taken off. Lessons can be learnt there and should be applied in the sanitation sector where applicable.

Social franchising approaches are promising in terms of replication and scaling-up[7]. In a franchising system, entrepreneurs with a suitable profile are identified and receive further training and capacity building in various areas, such as business development, marketing, financing, stock management and technical skills. In order to take the "sanitation as a business model" to the next level, a combined and coordinated effort from several entrepreneurs working together is needed (Devine, 2010, Sim et al., 2010).

Essential to this approach is to consider the economic base of the pyramid (BOP). The BOP does not only include the very poor (those living on under EUR 1 per day, for which most likely only subsidised sanitation products realistically can provide sanitation as an alternative to open defecation or unsafe basic facilities) but also those people that have an income of up to EUR 5.6[8] a day (UNDP, 2008). Millions of people in the BOP – especially in urban settings – are already consumers of items that can be classified as "non-essential" items, such as mobile phones, which illustrates that the poor do have purchasing power to a certain extent. In order to harness the purchasing power of the BOP, sanitation needs to be turned into a demand as Jenkins (2004) argues, "demand is created when consumers have motivation, opportunity and ability to purchase sanitation technology which suits their needs". Opportunity means having access to information, products and service, whereas ability refers to necessary resources (financial, time, skills, decision making).

Social entrepreneurs consider the BOP as a target market, and social business models have been proven to be viable, with one of the most prominent examples being the Grameen Bank in Bangladesh founded by Muhammad Yunus. Brooks (2009) defines a social entrepreneur as an individual – typically marked by innovativeness, achievement orientation, independence, sense of control over own destiny, low risk aversion, tolerance of ambiguity and community and social awareness – who adopts a mission to create and sustain social value, and recognises and pursues new opportunities to serve that mission.

Local governments, sanitation programme managers and other health and sanitation advocates need to provide strong incentives and work with effective sanitation marketing[9] tools to urge individuals to reprioritise their household budgets and include sanitation products and services such as hygiene upgrades[10] on their list of expenses. When working with the lowest income groups, social entrepreneurs, NGOs and governmental agencies need to take into account desirability, affordability and accessibility of sanitation products and services.

[4] An exchange rate of 1.43 USD to 1 Euro was used.

[5] The study scenario for the given range refers to investments linked to achieving Millennium Development Goal (MDG) 7 C.

[6] See New York Times article: Toilets and Cellphones from 24 May 2010 www.nytimes.com/2010/05/25/opinion/25iht-edcohen.html?_r=1

[7] See the Sanishop example in the SuSanA factsheet on Public awareness raising and sanitation marketing: http://susana.org/lang-en/library?view=ccbktypeitem&type=2&id=749

[8] An exchange rate of 1.43 USD to 1 Euro was used

[9] See SuSanA factsheet on Public awareness raising and sanitation marketing: http://susana.org/lang-en/library?view=ccbktypeitem&type=2&id=749

[10] Upgrades could include improvements such as more attractive squatting pans or pedestals, adding a shower or building a more robust superstructure.

4 Who does what in sanitation? Responsibilities of different actors

Collaboration between different public and private actors is crucial within the sanitation sector. The central government's involvement is important for effective policy-making and funding as well as for setting up agreements with private corporations which then implement appropriate infrastructure. Local governments can play an important part in engaging with small and medium enterprises, NGOs, social entrepreneurs and the civil society.

- In general, governments are most likely to have the mandate and human resources for organising and mobilising communities and awareness raising. However, in certain country contexts with e.g. weak political structures and high rates of corruption it might be more appropriate that other stakeholders like the private sector, NGOs, international agencies or different mass communication media such as newspapers, radio, television or internet play an important role in this process.
- NGOs are mainly financed by public funds, and need partnerships with enterprises in order to carry out projects that have the potential for scale and replication.
- Labour unions may help in complex transitions of national public sanitation bodies or programmes (Heierli et al., 2004).

Apart from the discussion of who is involved in sanitation, it is of utmost importance not only to look at single components of sanitation but to consider the whole sanitation services chain including all services that are required to be in place to deliver sustainable sanitation. The following selection shows different revenue opportunities within the sanitation services' chain[11]:

1. Production of sanitation hardware
2. Installation of sanitation systems
3. Operation and maintenance
4. Promotion and advertisements
5. Emptying of toilets and collection and safe disposal of faecal matter
6. Training and education
7. Reuse of e.g. nutrients, water, organic matter and biogas by e.g. commercial farmers

Examples of sanitation as a business with reference to the revenue opportunities (in brackets) that they include are discussed in the next section.

5 Examples of business approaches

The following examples for sustainable sanitation business approaches were provided mainly by members of the working group. They range from proven large business models (Examples in Section (a) and (d)) to small experimental models which are still in the development phase (examples in Section (c)). Giving these examples in this factsheet is not meant as a particular „endorsement" of the business model but primarily as interesting examples on how businesses around sanitation could be set up and about the challenges they face in order to achieve a sustainable system.

a) Example for (2), (3) and (4) - Installation, operation, maintenance and advertising: Public toilet management in city areas in Kenya

Since 2007, David Kuria (elected as Ashoka fellow in 2007[12]) has been working with social business models in his social enterprise EcoTact. One of EcoTact's social business products is the Ikotoilet mall, a community hub of stores and services built around a public toilet complex. People can use the facilities, as well as buy products and services available in the mall, such as shoe shining or barber booths, food stalls, phone and newspaper stands.

Figure 2: Ikotoilet at the Dagoreti marketplace (left) and close to the National Archive (right), Nairobi, Kenya (source: R. Ziegler and C. Dietsche, 2011).

The Ikotoilets are situated around Kenya with a concentration in the capital Nairobi including a number of facilities servicing urban slums. Due to inadequate sanitation provision in informal settings, slum dwellers either defecate in the open or use plastic bags ("flying toilets"). This poses negative consequences for urban planning, health and security for women[13].

David Kuria has worked together with urban slum dwellers and organised design workshops and held public health education courses for residents, private investors and local authorities to try and ensure the proper operation and maintenance of the facilities once built.

The public facilities have advertisement space that can be leased by companies for their promotion activities. The charging system of Ikotoilets differs between toilet blocks in low-income informal settlements and toilet blocks in middle or high income business areas. In middle and high income areas a pay-per-use system is applied which would be inadequate for low income informal settlements where families do not have household toilets and rely on the facilities on a regular basis. Hence in informal settlements where the Ikotoilets are served by a management committee which consists of 10-15 people from the community who

[11] However, although listed as single components here, they cannot be viewed as stand-alone components when it comes to application. They are strongly interdependent and thus have to be viewed in conjunction.

[12] Ashoka Fellow Profile of David Kuria: http://ashoka.org/fellow/4356

[13] For further information see: www.ecotact.org

also work in the micro-enterprises which are part of the Ikotoilet mall users are charged on a family sanitation flat rate. The committee members manage the flat rate system, keep the facilities clean, and perform necessary small repairs.

As of June 2011, 30 Ikotoilet buildings have been built of which three of them being in urban slums of Nairobi. Another ten in public primary schools are in the process of construction. In total the number of people being served by Ikotoilets (including the number of toilets under construction) adds up to about 30,000 people per day. EcoTact expects that in 2011 the number of Ikotoilet customers will continue to increase to 10 million customers per year compared to 6.2 million customers served in 2010.

Each Ikotoilet building provides squatting pans and flush toilets, waterless urinals and showers as well as a baby changing unit. The capital cost for one facility is EUR 14,000. Under Public Private Partnership (PPP) agreements the municipality provides the sites and approvals for the construction of the Ikotoilet buildings and thus the facilities become joint programmes displaying the authority's logo. After a period of five years, the facility is transferred to the municipality which can then operate it independently or lease it out to EcoTact again. Some of the Ikotoilet buildings are connected to biogas digesters while others are connected to septic tanks or sewers. Currently, Ikotoilets employs 150 staff members in Kenya.

EcoTact is now in the process of launching a franchise framework under the name of the "Ikotoilet Youth Franchise Incubation Model", which is aimed to generate young entrepreneurs in sanitation. This initiative is supported by the government of Kenya's Youth Enterprise Development Fund, and has stimulated demand across East Africa. David Kuria regards urban slums as the main strategic market for scaling-up,plans to spread the facilities to the almost 200 slums in Kenya, and new programmes are planned to start in Kampala in Uganda.

The Ikotoilet concept is seen as a long-term collaboration between urban communities, city authorities, and business communities in the East African region in which sanitation needs of the many are turned into returns for private investors and income for the management committee members.

b) Example for (5) and (7) - Collection of faecal sludge and safe disposal or reuse: On-site sanitation (septic tanks and pit latrines) in cities of developing countries

About one third of the world's population relies on on-site sanitation systems and will continue to do so in the foreseeable future (Koné and Strauss, 2004). As on-site sanitation technologies need regular emptying, there is a wide range of private (often informal) entrepreneurs in cities of developing countries providing services such as pit and septic tank emptying and transport of the faecal sludge. This can be manual or mechanised emptying with pumps, and subsequent transport. High emptying fees make this service unaffordable for some households thus leading to badly maintained and overflowing on-site facilities. Furthermore, faecal sludge is often indiscriminately dumped by the emptier to save costs and due to a lack of faecal sludge treatment plants. This may severely impact public health and the environment.

A case study conducted in the city of Dakar, Senegal, shows that companies struggle to be profitable if their services are focussed only on faecal sludge emptying for household on-site systems. Diversifying their services to include cleaning of sewage pipes, industrial waste services or even solid waste collection, can allow these companies to reach a return on investment upwards of 20%. Such an improvement of business opportunities might result in a drop of household emptying fees and thus significantly reducing the financial burden on the urban poor (Mbéguéré et al., 2010).

Investment and operational responsibility for existing treatment systems are often with the local authorities which have the mandate to ensure treatment of waste to protect human and environmental health. The aspect of creating value from waste has hardly been the centre of attention but this could change e.g. if fertiliser becomes more expensive (Box 1).

Box 1: Can nutrient reuse create a market for human excreta (example for (7))?

The marketing of human excreta presents a promising option for generating money with a service that is often not delivered at all or implemented deficiently in many regions of the world. Schroeder (2011) conducted a study in which he examined possible ways to dispose of human excreta from slum areas in Kampala, Uganda. The study aimed to design a logistics system that connects slums with agricultural areas requiring certain amounts of nutrients. The results of the study found that the logistics of human excreta collection should ideally be carried out by a private company in order to assure maximum efficiency and improve the system's economic sustainability. Income could be generated by the sales of sanitised human excreta as fertiliser. Monetary (or alternatively material good) incentives should be used as motivators to align the efforts of the sanitation system stakeholders at the slum level.

There are several possible approaches for creating value from excreta. The concept of "productive sanitation" is described in detail in Gensch et al. (2012) and only short examples are listed here: use of source-separated urine, struvite production, Arborloo, (co-)composting and short rotation plantations.

Encouraging the development of products from excreta and identifying and developing markets for these products will help combat uncontrolled discharge of excreta, which is imperative to achieving public and environmental health objectives. In addition, it will also trigger private enterprise involvement in scaling-up and replication of such approaches (Koné, 2010). Urban-poor households will benefit from these improved business opportunities through lower costs for services, and improved quality and reliability, and availability.

In order to develop market-based approaches with business models that provide both long term social benefit and profit

in a sustainable manner, the last link in the value chain, nutrient reuse, needs to be developed into a marketable and demanded product. To make this a reality in a sustainable manner and to "harness" the potential value of excreta, innovative entrepreneurs, businessmen, governments, donors and NGOs need to collaborate and build such a market place.

c) Examples for (1), (2) and (3): Creating jobs and income with mobile UDDTs (Urine Diversion Dehydrating Toilets) and UDDT business in India

Ecoloove is an interdisciplinary social venture[14], founded in 2008. Ecoloove was started with the aim to develop affordable ecological sanitation (ecosan) solutions for people in developing countries. A mobile ecosan system (UDDTs) was designed to be run by women living in slums in India.

The overall objective is to provide more public toilets in low income areas, lower the risk of sanitation related diseases and to create jobs and micro-business opportunities in particular for women. Furthermore, Ecoloove aims to raise public awareness about sanitation.

The first product design is a mobile urine diversion toilet built on a traditional rickshaw. A metal base structure is welded to the cycle. Panels made of lightweight bamboo are attached to the metal base structure. The roof is made of epoxy plastic strengthened by a bamboo mat. The roof lets light in without being transparent. Currently, Ecoloove is using locally manufactured buckets[15] on a shelf under the floor for collecting faeces and urine separately.

The female entrepreneurs, called "toil-o-preneurs" lease the toilets from Ecoloove at a minimal rate which is made possible by selling advertisement space on the outside and inside of the toilets. In partnership with the local NGO PLC WatSan, these women also receive training on sanitation, operating and maintaining the toilet properly.

The "toil-o-preneur", can generate income by charging small amounts of money per use 0.03 EUR (2 Rupee), running a shop for sanitary products alongside the toilet and in the future when the project scales-up selling sanitised urine and faeces to farmers is foreseen to be viable.
A trial took place in Bareja, Ahmedabad, Gujarat state in India in 2010 with 23 users and one toilet[16]. In order to increase social acceptance for their toilets, Ecoloove has implemented a constant feedback system to adjust the development to the user's need. The participating "toil-o-preneurs" have received extremely positive feedback from all parties involved – users, farmers, one NGO, and the local leaders. The main reasons for their interest were: Generating income (all stakeholders), the need of having proper toilets (all stakeholders), the option of receiving cheaper ecological fertiliser and the prevention of crops being damaged by people using the fields as toilets (farmers).

Figure 3: The interior of an Ecoloove with the "toil-o-preneur" and customers (source: A. Segtnan, 2010)[17]

A similar project model with mobile UDDTs has been carried out by the NGO Wherever the Need (WTN) in India. Since late 2009, WTN has been trialling a mobile UDDT system in Cuddalore Old Town, Tamil Nadu. The primary aim when launching the project was to discover whether mobile UDDTs could be used in an inner-city location. The challenges faced were the lack of space, the logistics of collection, storage, treatment and disposal of both urine and faeces. The secondary focus was to investigate whether these services could be turned into a viable business.

To begin with usage was low, but over time and with encouragement from WTN ground staff, more and more people started using the mobile unit. There was no charge for women to use the urinals, thus women could avoid urinating in the open where they felt vulnerable. Initially 0.015 EUR (1 rupee) was charged for defecation, this was later also changed to being free of charge. After one year, 150 people regularly used the unit daily.

Faeces are deposited in plastic crates and taken to a storage unit by a small vehicle designed specifically for this purpose. The faeces are stored in the crates for a short while and are then vermi composted. Urine is decanted into a container for storage, although to date much of it is immediately bought and used on fields. The logistics have been tested and a process agreed upon to ensure safe handling and storage.

Urine is sold to local farmers at 0.015 EUR for four litres, and the compost is currently used on a small trial field to demonstrate growing benefits. The estimated price that the compost could fetch is 0.10 EUR (7 rupees) per kilo if it were to be sold.

[14] Ecoloove is funded by the Swedish industrial designer Annamaja Segtnan through awards from competitions, institutions, investors, farmers, factory owners and donations. The organisation's portfolio includes industrial design, engineering, production, marketing, service design, business development as well as an ecosan NGO.

[15] The bucket is locally produced; it is a "no-name" product without a specific brand. It is produced in Gujarat, India at a very low price, around 0.6 EUR per bucket.

[16] See the blog entry on Friday, March 5, 2010 for photos at http://ecoloove.blogspot.com/

[17] This photo was taken from: www.ecoloove.com/product_interior2.html where you can also find out more about the recent activities of Ecoloove.

The superstructure of the mobile toilet is made of steel and fibreglass. Additionally, there have been design modifications regarding the size of future toilet units and the needs of people with disabilities and the elderly with handrails both inside and outside making access easier[18].

A subsequent trial will be carried out at six locations with one of the units being a urinal only. Monitoring, maintenance, logistics of the products (urine and faeces) and its subsequent sale have been recognised as key success factors. WTN believes that the distribution network and sale of the product is crucial and that entrepreneurs could create micro-distribution networks. WTN is considering becoming one of the networks. Elaboration on various project details such as scaled up costs and how these will be covered still needs to take place[19].

The two examples given in this section are very innovative and promising but need further development work before they can finally be scaled up.

d) Examples for (2), (5) and (6): School toilet cleaning and maintenance services, training and hygiene education

In 1996 Trevor Mulaudzi launched "The Clean Shop", a "clean-up business" for public toilets and school toilets in South African townships. This social enterprise succeeds in making sanitation a business by providing services and changing people's mindsets about hygiene and cleanliness in public schools and communities.

The Clean Shop got engaged in community projects by using schools as a distribution channel for sanitation products and services. The company bought toilet paper and cleaning material on a large scale, and then sold the products to local schools at a low price. He encouraged the school staff to retail these products to parents and the community as a school fundraising effort. The schools could compete with shops offering the same products and act as a retailer for sanitation products which were not available in the area, and thereby generate an income.

With respect to sanitation services, the Clean Shop's team of professional toilet cleaners provides training to students, teachers, and administration staff about good toilet and hygiene practices as well as training on maintaining and using the facilities correctly. The Clean Shop also offers maintenance services, such as thorough cleaning of school toilets, repairing pipes and plumbing.

In order to create a sustainable business model, the Clean Shop diversified its field of business and also started cleaning change houses, kitchens, hostels and residential flats for mining companies[20].

Figure 4: The Baranuka High School (in Lulekani, South Africa) toilet block that was built by The Clean Shop and Trevor Mulaudzi and serviced by the school (source: T. Mulaudzi, 2008)

Since the start of the business in 1996, The Clean Shop has employed over 350 highly motivated and technically competent toilet cleaners, and the businesses turn-over has grown to about EUR 100,000 per month.

On the 2010 World Toilet Day (19 November) Trevor Mulaudzi was appointed by Unilever/Domestos South Africa, as Unilever's implementing agent of good toilet facilities in public schools in South Africa. Unilever funds repair and plumbing work at school toilets and ablution blocks and The Clean Shop carries out the services. Furthermore the idea was to train parents (mostly mothers) as school toilet technicians, cleaners and hygiene education teachers who then could be hired by the schools. At the same time children are taught how to share their learning with their parents at home about good toilet manners like using toilet paper and washing their hands with soap (Unilever soap is promoted in this process).

A further example from Kenya of an enterprise with a decentralised business model and also providing similar services to those of The Clean Shop, is Community Cleaning Services (CCS) which was launched in 2006 in Nairobi as a non-profit social enterprise. CCS combines the expertise of local entrepreneurs, the household products multi-national SC Johnson and the international NGO Plan International. The combined expertise delivers what CCS terms an "innovative turnkey solution to the "software" (ongoing management and maintenance of toilets) challenges, as opposed to the toilet "hardware" or infrastructure construction challenges, of urban sanitation"[21]. CCS is currently active within the city of Nairobi.

The goal of CCS is to engage low-income urban communities to create demand for cleanliness, hygiene and sanitation which in turn creates a market for sanitation professionals to improve their livelihoods and their own communities. To achieve this goal the following two core areas are focussed on:

[18] Photos from the project: www.whereverthenead.org.uk/projects/indian-projects/mobile-unit-cuddalore/

[19] Currently there is a private donor providing funds for the first, second and one mobile toilet module in the third phase of the project.

[20] See Financial Mail article: *Civic duty. Addressing social inequity by adopting a social approach to conducting business* from 26 October 2007, http://free.financialmail.co.za/report07/shell07/ashell.htm

[21] The contact person at CCS is Joseph Njenga: joseph.njenga@comcservice.com

- Training of sanitation service providers
- Ongoing quality assurance, mentoring and marketing support

The training of sanitation service providers includes three training sub-components which are: training on cleaning, business management, sanitation marketing and awareness raising. Two groups of sanitation service providers have been focussed on by CCS to receive training, namely Mobile Cleaning Teams (MCTs) and Public Toilet Operators.

CCS has measured their impact and in their latest report in May 2011 stated that over 200 people have been trained in sanitation services provision and business management, and that over 300 community members have been trained in sanitation awareness leadership and facilitation. At the time of the report there were 10 active Mobile Cleaning Team Leaders who employed 60 professional cleaners. With respect to sanitation awareness it is estimated that 2500 community members have become active in this area after open meetings initiated by the trained CCS community members. The CCS MCTs clean on average 780 school toilets and 225 household toilets per month in low-income areas in Nairobi, and a conservative estimate puts the number of people who benefit from this at 500,000 per month.

Box 2: Support for starting up a business in Sustainable Sanitation and Water Management

CEWAS - the international centre for water management services - combines advanced education and support to young professionals to start up a business in the field of sustainable sanitation and water resource management. It builds up SMEs (Small and Medium size Enterprises) that can offer technical and managerial expertise to national and international organisations and private clients. Start-ups are supported by a core group of international experts, bringing in their expertise and the current state-of-the-art knowledge. CEWAS was started in 2009. Since then, several trainings have been carried out on sustainable sanitation, business development and business plan development as well as on presentation skills, team building, sustainability and ethics. The one year Start-Up programme including education and training personal coaching by international senior experts, a networking platform and office sharing facilities was launched in May 2010[22].

6 Outlook

The examples show that sanitation can be a profitable and viable business opportunity and offers many entry points in the value chain. In these particular examples, business was done by producing and installing sanitation products, providing maintenance or collection services, collecting user fees in public toilets and selling advertisement spaces in toilets and on vehicles. Other examples can be found for businesses in training and education and - possibly - reuse.

An observation from recent sanitation programmes is that they have been largely implemented by sanitation sector specialists, such as engineers, rather than business and marketing experts (Devine, 2010). This may be one reason that has contributed to the limited successes in scaling up projects to serve the mass market.

The sanitation sector has the potential to provide economically viable business opportunities for both public and private organisations. Although this factsheet puts a strong emphasis on private and social enterprises, the role of government must not be overlooked. Improved regulation in the sanitation sector, as well as simplification of the registration of micro-businesses in the sanitation sector, are key areas in which government can play a leading role. This would lead to facilitating an enabling environment for private sanitation suppliers.

Collaboration between private and public entities in sanitation should be encouraged with examples such as the Ikotoilets, where the municipalities provide sites and approvals for the construction and the private sector covers investment costs. Private and social businesses should be encouraged further to increase their presence in service provision in the sanitation sector. The sale of sanitation products will remain dominated by the private sector, but more social enterprises should become active in the product area so as to establish a wider distribution network to reach the people who need these sanitation products the most. NGOs will continue to play the part of advocates, innovators and implementers that work for more public awareness and social dialogue (cf. WTN).

Lastly, it has to be emphasised again that the 4 billion people that fall in the Base of the Pyramid (BOP) income bracket and are suffering from the sanitation crisis need to be viewed as valued customers and a potential market by sanitation businesses.

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