Sanitation markets model – *DRAFT – 10-Sep-2016*

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***Introduction***

This draft paper attempts to summarize and organize ideas on the different motivations, challenges, roles and responsibilities that various actors in the sanitation market place have, or should have. This paper has benefited very much from a number of discussions on the internet forum of the Sustainable Sanitation Alliance (Susana.org/forum). In fact, it can be seen as an attempt to summarize parts of these discussions. The paper does however represent the interpretations and opinions of the authors, and not the opinion of the Susana network.

As with any paper on markets, development and governance, there is a basic worldview underlying the analyses. Some of the fundaments of this text are our convictions that:

1. Governments have a large role to play in increasing sanitation coverage.
2. (I)NGO sector should restrict its role to advocacy or work through (local) government actors as much as possible.
3. By far the largest share of populations will have to be motivated to pay for their own toilets; subsidies can only be used very sparingly.
4. Unlocking private sector initiative and acknowledging the need for a profit motive is most likely to lead to scale the fastest. However, this has to happen within government technical and environmental standards and with a reasonable level of consumer protection.

Further, we should recognize that every country is unique. Therefore, the most urgent roadblocks for private sector growth in the sanitation sector will vary from place to place. There is no “one size fits all” prescription.

The focus of this draft paper is on the developing world, we do realize that in the more developed world there are also challenges in the sanitation markets, and that there are many actors which try to address them. We focus on the developing world, as this paper mainly tries to shed light on emerging market situations. Finally, some readers will find that the role of the non-governmental and development aid sector is not given much attention in this paper. The reason is that we wanted to explicitly explore a model with a modest role for these sectors, to highlight the roles of the population, government and private sector.

***Overview of market stakeholders***

We identify 5 main stakeholders in the sanitation market in developing countries:

* Population (P): individuals and community-based organizations; end-users
* Private sector entrepreneurs (E): for-profit small, medium and large-sized organizations; formal and informal entrepreneurs that deliver products and services to the end user
* Government (G): sate actors at all levels (local, regional and national; including utilities).
* Non-profit and Non-government actors: Non governmental actors without a profit motive; NGOs, CBOs, “Local champions”, etc.
* Foreign government through development aid agencies (FG)

Schematically their mutual relations can be depicted as follows:



**Figure 1, Sanitation market schematic**

The schematic representation shows how each of the three main stakeholders has relations with each other, and that the NGO sector can “dock” with any of the three based on their working style and priorities. The work of foreign governments goes either directly through the host government or via a development agency, which in the figure has been included in the “N” group for clarity. This schema is the same for rural and (peri)-urban settings, but, as we will discuss later, the relations and interactions can be very different in different settings.

***Types of products and services***

For this document, we would like to make a distinction between two groups of products and services. As any distinction, it is not perfect and some people may disagree. The two types that we define are:

1. ***Front-end products***

This is the hardware and the services that are usually bought by the individual end users, such as a toilet or an on-site sanitation system *e.g*. flush toilet, pit latrine, septic tank, etc.

1. ***Back-end products***

These are the hardware and services related to the conveyance and treatment systems. Back-end products can again be divided into two very distinct types:

2.1 Sewer-based back-end products including the sewerage network and connected treatment and reuse or disposal systems.

2.2. Non-sewer-based back-end products that collect, treat, and reuse or dispose faecal sludge and excreta from on-site sanitation systems.

This distinction is important because the market for front-end products is less complex in terms of hardware and organization involved than the market for back-end products. The former usually involves transactions between one user and one entrepreneur, where the latter usually involves a larger group of users, entrepreneurs and authorities. This means that for back-end services, normally, a form of collective funding (taxes or tariffs) is required. One of the reasons that rural sanitation projects are often relatively simpler is that often little or no back-end services are included.

***Main actors' motivations and challenges***

**Population**

They are the end users of all sanitation services. The overall goal should be for the population of a country to improve their health and economic status through sanitation. From a market perspective, they are the customer and pay for products and services.

*Motivations:*

Depend mainly on their aspirations, which include cultural preferences and awareness.

* Privacy
* Convenience
* Improved hygiene (overall cleanliness of their environment).
* Improved health.
* Status

*Challenges:*

* Ability to pay.
* Willingness to pay for front-end services (depends on aspirations and land ownership issues).
* Willingness to pay for back-end services. This is probably low in most cases as it normally means taxation for services further away from the house (*e.g.* centralized treatment facilities).
* Informal settlements and land tenant issues.
* Limited awareness of what sanitation solutions are available and what is best considering personal circumstances.

**Sanitation Entrepreneurs**

We see sanitation entrepreneurs as vital in achieving scale, especially in providing front-end services. For back-end services, there could be a role for both private sector involvement and public utilities.

*Motivations:*

* Provide hardware and services for a profit.
* Sometimes a “social entrepreneurship” motivation may exist.

*Challenges:*

* Often small enterprises, which cannot advertise at a scale needed to “make a market”.
* Often good sales people, but not necessary good entrepreneurs / managers.
* Lack of deeper knowledge about the products they sell. (Cannot adapt products to new markets, or different environmental challenges.)
* Lack of access to credit at rates low enough to encourage them to expand their business.
* Lack of incentives to expand their business if there is no stable governance environment. (Long term government commitment to keep sanitation on the agenda as a priority.)
* Do not always target the lower income segments of the populations.

**Governments**

We see the government as the only actor which can motivate the population towards better sanitation at the scale of the whole society. It can do this with the aid of development aid agencies, NGOs, CBOs and the private sector, but governments are the only actor that can work on a nation-wide scale. The services provided by utilities are included under the government role in this paper.

*Motivations:*

* Forster development, improve the health of the population and environmental protection.
* Achieve internationally agreed goals and targets (e.g. water and sanitation as a human right, SDGs)

*Challenges:*

* The long-term commitment that sanitation requires is often lacking, both with the government and with the foreign governments supporting them through development aid.
* Limited awareness on the externalities of poor sanitation and hygiene and the links between improved sanitation and economic development.
* Benefits are often not visible during a single government's term (long-term effect).
* Limited financial and sufficiently trained human resources, and competing development goals.
* Lack of strategic planning for the sanitation sector and no clear distribution of responsibilities between different government agencies.
* Government engineers and international consultants often come up with large scale, expensive and complicated solutions for urban sanitation. This can make the subject seem out of reach for governments.

**Non-profit and Non-Government sector**

This is a diffuse group. It includes (I)NGOs, Community Based Organizations (CBOs) and local champions who inspire their communities. As the motivations of such a diverse group are necessarily also wide ranging, we can only summarize them in broad terms here.

*Motivations:*

* Improving the lives and health of their community members, or target group.
* Demand creation for sanitation services (for example by a sanitation entrepreneurs’ lobby platform).
* Filling gaps in service provision to provide safe sanitation (*e.g*. financing gaps, hardware gaps, capacity development).

*Challenges:*

* In the case of INGOs, limited understanding of the local context and consequently difficulties to know where and how to provide support.
* Often limited to pilots without a larger integration within government policies and strategies.
* Work is often related to internationally set targets, and “fashions”, which might be divergent from local targets and are often fluctuating over time (difficulties of long-term commitment).
* Especially local organizations often end up balancing a large number of conflicting interests in their work.

**Foreign Governments and Development aid agencies**

Closely related to the Non-profit and Non-Government sector, due to their scale and access they are well positioned to advice governments on improving sanitation policies and markets.

*Motivations:*

* Depends on the governmental strategy for development aid and economic cooperation.
* Solidarity
* Creating business opportunities for home-country service providers.

*Challenges:*

* Inherently (perceived as) politically biased.
* Difficulties to link to the community level.
* Long-term partnership might be endangered due to changes in the thematic or regional focus of home country.
* Short funding cycles in relation to the scope of their interventions.

***Relations between the actors in the sanitation market place***

**Population-Government**

Along the Population-Government (PG) axis we distinguish the following main interactions with regard to sanitation:

*Roles:*

* The government should motivate the population to improve their sanitation situation. Both through setting and enforcing rules and through social advertising.
* The government should provide back-end services through utilities or pay private sector actors to provide such services.
* The population should pay taxes to enable the government to fulfill its role.

*Potential conflict:*

* Taxation is often contested (and avoided). Very few people like to pay tax, and in most developing countries people's experience is that governments usually do not deliver value for tax money.
* Depending on the political situation, the population has more or less agency to demand improved services from the government.

**Population-Sanitation entrepreneurs**

Along the PE axis, we see the following main interactions:

*Roles:*

* Population are the paying customers of the private sector for both front and back-end services.
* Private sector can do some promotion activities, but we see this more as advertising their services once a basic demand for sanitation has been created.

*Conflict potential:*

* Relation may be tense if private sector does not supply good quality products (in developing nations it is often difficult to hold a contractor who fails to deliver good products accountable).

**Sanitation entrepreneurs - Government**

The interactions along EG axis are perhaps the most complicated, as this is where most of the back-end services need to be organized.

**Front-end services:**

*Roles:*

* The national government should provide a sector strategy and clearly define the roles and responsibility of Sub-National Governments.
* The government should set national standards for toilets and decentralized treatment facilities.
* The standards need to be actively disseminated and promoted, as the sanitation entrepreneurs may not be able to improve their products to meet standards by themselves. Maybe countries need a sanitation extension service, much like agricultural extension services.
* The government actors need to convince the Sanitation entrepreneurs that sanitation will remain a government priority, and thus a stable market.

*Conflict potential:*

* The national standards should be enforced in a fair and equitable manner.

**Back-end services**

*Roles:*

* The government should set national standards for effluent and byproduct disposal, and enforce them.
* Private sector companies can be hired by governments to build infrastructure and to operate treatment facilities. In this case the government is a customer of the sanitation entrepreneurs.
* The investments in infrastructure needed for back-end services (apart maybe from the cost of emptying trucks) will for a mainly have to be borne by the government.

*Conflict potential:*

* Utilities can be in competition with Sanitation Entrepreneurs to deliver some services.
* Developing countries often have high levels of corruption; this can make the relations along this axis (especially for higher value back-end service contracts) complicated.

Some of the key roles from the discussion above are presented in figure 2.



**Figure 2, Sanitation markets schematic with key roles of main actors.**

***Subsidies***

So far we have avoided the subsidy subject (or S-word). This is not because we think there is no place for subsidies in the sanitation sector in any way. However, we do think that subsidies should be very well thought through, and be done in such a way as to *compliment* market development. They should not be used to “kick start” a market, but to strategically address challenges that prevent markets from reaching everyone. For example, if it is clear that sanitation entrepreneurs want to grow but cannot because of a lack of credit facilities, a government could help them with low interest credit. Also, it is unlikely that all members of the population have the ability to pay for front-end services. In our view, a targeted subsidy system would help those people who do not have the ability to pay to buy products and services from an *already developed* private sector supply chain.