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The Financial Challenge Strategies to Finance Investment and Ensure Sustainable Operation

Financial Challenges

- Is the lack of financing opportunities really the core problem?
- Are subsidies for toilets the miracle solution?
- Can people afford, can institutions manage sustainable sanitation systems?
- What financing options can really make a change?

Challenges in rural areas

Decentralised sanitation solutions are generally adequate for rural areas. In rural settlements, most people own their housing and plot size allows building latrines or dry toilets on-site. The per capita investment for latrines varies around an equivalent of 2 – 10%¹ of household income. Only in very difficult natural conditions (rocky soil; flooded areas) or for very poor households, investment is not affordable.

However, far too often, hygiene and sanitation is not a top priority on how to spend a limited family's budget. The costs of mortality and morbidity due to insufficient hygiene generally outweigh the cost of proper hygiene and sanitation.

Challenges in urban and peri-urban areas

More and more people without access to improved sanitation are living in urban areas and their number is likely to grow rapidly in next years. Health risks in densely populated urban areas are particularly high. Specific problems are:

- open defecation generating high infection pressure and security problems for women;
- a growing share of tenants with precarious status, unable to invest in a housing they do not own;
- house owners without land title who avoid investment as long as it is not clear what part of the plot they may lose for public roads;
- on-site solutions losing their treatment effect due to overload;
- overflow from on-site facilities without treatment to storm water and irrigation systems;
- lack of pit and septic tank emptying services and/or inappropriate discharge;
- costly central sewer systems without adequate operation and treatment.

¹ Investment 70 – 200 USD for one household; household income e.g. 1.500 – 3.000 USD / year

With growing population density and growing distance to agricultural plots, households cannot re-use the product of on-site treatment directly for agriculture or aquaculture. If plots are very small, there is often even not enough space for on-site treatment. As agglomerations grow, the cost of transport from on-site facilities might reach a point where low cost central or semi-central systems become economically more feasible.

Way forward

Up-scaling the financing of hygiene awareness and the promotion of adapted sanitation

Hygiene awareness is often left to NGOs and not high on the national investment agenda. The success of the total sanitation approach of India shows the importance of putting investment in people first. Water investment has to go hand in hand with investment in hygiene awareness and knowledge about proper sanitation solutions. The decentralised sanitation solutions offered must be adapted to varying local conditions, even within communities.

What is the benefit of hygiene and sanitation?

Better hygiene and sanitation can reduce the adult morbidity in average by two working days. This represents roughly 1% of household income.

Better hygiene and sanitation can save 2 to 3 children a year in a community of 1000, reduce cost for treatment and time for care. The benefit might make up for another 1% of household income.

A demand driven change requires more than one single technical option. Appropriate on-site solutions with investment cost of 2 – 5% of household income generally do not require subsidies to households. The total annual cost of recommended sanitation solutions (investment and operation in cash or labour) should remain affordable in the range of 1 - 2% of household income. Affordability might require that a maximum health impact is sought while accepting compromises on the ecological impact.

Up-scaling the financing of urban planning and secure ownership

Urban planning including decentralised sanitation is a precondition for sustainable and low cost sanitation solutions. Where population density and transport cost do not justify preserving on-site sanitation, urban planning has to assess thoroughly sustainable low cost semi-central or central solutions (decentralised ponds, condominial sewerage etc) and provide a plan adjusted to local conditions and to rapid urban growth.

In a longer term perspective, planning is also a precondition to secure ownership for poorer households. Secure ownership and access to credit can give poorer people a real chance to invest in housing including sanitation.

Finance investment in decentralised sanitation in urban areas

Without access to credit, poor urban house owners might still need partially subsidised solutions, while the situation of tenants also depends on how owners are encouraged or obliged to improve facilities. All people have a very high preference for private facilities, but if space or lacking ownership does not allow individual toilets, public toilets are an interim option. One interesting financing approach is output based aid for private providers of public toilets and washing facilities (similar to the Sulabh experience in India). The attractiveness of public facilities generally depends on cleanliness and maintenance and users have to be willing and able to pay for services.

Most on-site solutions in an urban setting require additional off-site infrastructure (treatment, disposal, reuse) to avoid health hazards. Most cities have a private sector providing services such as emptying pits and septic tanks, but mostly without ensuring any treatment or proper disposal. In this type of market it is difficult to introduce better treatment, disposal or reuse at full cost. Investment subsidies for the public infrastructure can be one element. Another element might be a cross subsidy of operation cost on municipal or utility level from local taxes (e.g. property taxes) or fees (e.g. sanitation) to prevent uncontrollable illegal discharge. Finally, it is crucial, to organise partnerships with the private service providers (cess-pit emptiers) and pursue illegal dumping.

Finance investment in low cost wastewater collection and treatment

Growing cities generate also growing risks for public health from non-functioning sewer systems or the discharge of untreated wastewater. Fighting these deficiencies has to be an integral part of the MDG development strategy. The investment can make a big change in health risks for many people living around uncontrolled outlets or relying on down-stream waters. Reliable and cost efficient operation has to be a main focus. This requires investment in capacity building on institutional level but it also requires political backing to enforce user fees required for sustainable operation.

Financing Instruments

The consequent mainstreaming of hygiene is difficult in a fragmented and regional project approach. National leadership has to ensure that efforts of all partners are put together in order to attain a countrywide coverage of hygiene education and sanitation marketing.

The efficient bundling of donor funding has to go hand in hand with a commitment of national funds to the sanitation sector, e.g. as national water and sanitation funds. Such funds could grant hygiene campaigns and sanitation marketing, investment in municipal facilities for off-site treatment, disposal and reuse, investment in low cost semi-central or central systems and investment in the upgrading of deficient existing central systems.

Sustainable operation of small on-site systems depends on cost-efficiency, awareness and knowledge. Off-site services and semi-central or central systems however depend on reliable financing sources for operation and maintenance such as user fees for services or property taxes. Similar to water there is still a need to improve and exchange on best practice for smart, efficient and sustainable financing of sanitation services, including partnerships with the private sector.

In a longer run, a real turnaround in urban development and capital building will come from an appropriate legal and institutional environment for asset backed bank loans, which will broaden access to property and boost investment in housing.