Increasing access to adequate sanitation

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Your Majesty, Ladies and Gentlemen, it is a great pleasure and honour to be here in Stockholm to present this paper, which presents some personal experiences and thoughts in the area of increasing access to adequate sanitation.

According to global statistics 2.5 billion people do not have access to adequate sanitation. The question is, what is adequate sanitation? Clearly what is considered adequate depends on where you are and what conditions you live in. The variation throughout the world is enormous. Sadly, it reveals the widely ranging conditions under which Man lives.

Maintaining adequate sanitation in the towns and cities

Problems of access to sanitation exist in large cities and towns as well as in the rural areas. In the towns and cities of the world the flush toilet has become standard. The world as we know it could not have existed without the flush toilet. And that is not likely to change. Low volume flush toilets clearly show great promise for the future.

But flush toilets depend on water – without water they fail. So a problem occurs when water becomes scarce in the cities and towns – and this problem is faced regularly on the African continent. What happens then is a loss of access to an essential facility Hand flushing become necessary! Or an alternative “back-up.”
For towns and cities clearly the answer lies in restoring the water supply - a huge task requiring upgrading and rehabilitation of an existing but failing piped supply. This remains the only long term solution.

Many flush toilets remain functional because families and institutions rely on “self-supply” these days, using their own wells and boreholes and storage tanks to supply water. These private supplies keep flush toilets working. In some African cities like Gaborone, flush toilets can be backed up by VIP toilets on the same stand if the back yard is large enough. An emptying service exists for emptying these pit toilets. Such back up toilets can be valuable at times when water is short. In fact many African cities use a combination of flush, and pit toilets with eco-toilets on the rise as well.

**Providing adequate sanitation to the rural poor.**

Providing adequate sanitation to the rural poor is seen as an even great priority and many approaches are being tried. For many parts of rural Africa, where open defecation is still common, adequate sanitation will likely be some form of pit toilet for some time to come. What steps show signs of success in “adequate sanitation provision.” Various approaches have been tried, some more successful than others

**Larger internal nationally supported subsidies can work**

The only case of this in Africa is South Africa where families are provided with a subsidy of R5000 (£500) to build a VIP toilet. This also involves a pit emptying service. Such a support system is impressing but not practical outside South Africa which has the wealth to support it.
Larger externally supported subsidies can work but are not sustainable.

The Blair VIP program in Zimbabwe is one example. After 1980 the external donors were generous and agreed with the GOZ to provide generous material support (subsidy) for family BVIPs (value about $60) and also school multi-compartment BVIPs. In this way nearly half a million households benefitted and also large numbers of schools.

But for poor rural folk, the cost of building the BVIP to government standards proved to be too high. The program depended on donor hand outs which are no longer acceptable to the donor community. GOZ is now trying an alternative approach, based on a start simple and upgrade process. This is described later in this presentation.

The CLTS story
Another approach, called CLTS (Community Led Total Sanitation) is also being tried, to reduce the extent of open defecation within communities. This concept depends on the creation of disgust and shame within communities in an attempt to motivate communities to reduce open defecation and built toilets themselves.

This educational approach, can work in some places but uses humiliation as a tool, unlike MOH head educational models and does not provide any material incentives (subsidy) for the proper constructions of adequate latrines. The lasting benefit of this approach, especially in Africa, is yet to be judged.
The SANPLAT story.

The SANPLAT is a sanitary platform design developed by Bjorn Brandberg is used to cover a pit toilet and uses small material assistance to promote it.

It is the simplest and most effective way of improving the most basic of pit toilets, by providing an easily washed down sanitary surface and a cover for the squat hole. Over 4 million of these simple yet effective units have been placed into use throughout Africa and Asia. The SANPLAT is usually made of concrete but very smart small plastic units are also available. It is mounted over a pit which may be partly or fully lined and is fitted with a tight fitting lid which helps reduce flies.

Evidence shows that once the slab is owned by a family it is retained and re-used revealing a sustainable element.

The Arborloo Story

The Arborloo is the simplest of ecological toilets, where a combination of excreta, soil and ash are placed down a shallow pit. A simple concrete slab is provided to cover the shallow pit. Once the pit is nearly full, the slab and structure are moved to a newly dug pit. Soil is added above the contents of the near full pit and a tree is planted. The tree gains nutrients from the decomposing material in the pit. 90 000 units have been put into place through a CRS sponsored program in Ethiopia and East Africa and about 10 000 more in more unit in other countries such as Malawi. The tree toilet uses a small slab as material assistance together with a tree planting concept (cost US$7.00).

In this case the support provides more than a toilet alone, but
leaves a series of “organic plugs” in the soil in which trees can grow. The concept is low cost and provides a multi-purpose unit. Slabs can be used on a never ending journey through the lands with trees growing along the trail

Start simple and upgrade. The uBVIP story.

In this concept the provision of a single bag of cement is enough to make a concrete slab and make the mortar to line a pit with bricks which will last 10 years. Small material subsidy is ideally provided in the form of one bag of cement (Cost of material assistance US$14.00).

The versatile slab is designed so that an upgradeable series of toilet structures can be built on top, starting with the most basic and ending with a brick built BVIP. The family itself chooses the type of superstructure it can afford.

The material assistance is placed in the substructure, pit and lining) and the permanent slab. This concept is currently under trial in Zimbabwe

The importance of material assistance

Whilst there is controversy over the issues of material assistance and subsidy it is very clear that a small subsidy to poor families helps them enormously in building their own toilet. It acts as a very strong incentive and motivating force, especially for the poor, especially when combined with allied education.

As one of the most revered health promoter in Zimbabwe, Nason Mtakwa once said… “A small subsidy acts as a strong motivating force and helps to put theory into practice!”
Conclusions

Leaving something that lasts, which is real, tangible, practical and gives lasting benefit makes real sense to rich and poor alike and can make sanitation projects sustainable. And things that may last for a long time and outlive us are toilet slabs, which form a central component of all rural toilets, and the trees of all sorts which follow them.

To one and all of you, thank you.