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**WATER, SANITATION AND HYGIENE SERVICES BEYOND 2015:
IMPROVING ACCESS AND SUSTAINABILITY**

**Replicating the sanitation marketing model of the low cost
product 'Easy Latrine' in Sindh Province, South Pakistan**

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This case study documents the introduction by Action Against Hunger of the sanitation marketing of Easy Latrines in Southern Pakistan. It explains its adaptation to the local context, and introduces very encouraging initial results with the demand and the offer both growing within months after the introduction of the concept. The approach was however subsidized and lasted only a few months: discussions are proposed for further analysis and improvements to ensure it addresses well the major crisis of open defecation in Pakistan.

Context

According to every source and as highlighted in the Joint Monitoring Programme reports, Pakistan is not on track to achieve the Millennium Development Goals on sanitation and now striving hard to achieve sustainable development goals for 2025. In particular, its southern province of Sindh is facing a severe problem of open defecation: an estimated 19% of rural households have access to safe excreta disposal facilities. 16.93 million Sindhi people live without any sanitation facility, either improved or unimproved, and systematically defecate in the open.

During the massive floods of 2010, 2011 and 2012, Sindh was one of the worst affected provinces of Pakistan. People lost everything; homes were washed away and livelihoods were disrupted. All of these factors have highlighted in an acute nutrition emergency requiring both treatment and preventive measures. The National Nutrition Survey 2011 found that half of the children in Sindh are stunted, making them more vulnerable to diseases, impaired growth, and ultimately cognitive development and economical chances during their adult life. Open defecation, and poor hygienic practices in general, are now clearly linked with the risk of undernutrition among children.

As in many contexts, there was an assumption that people defecate in the open because they are poor and cannot afford a latrine. Various rural sanitation programs led by governmental or non-governmental initiatives significantly invested in waste water management, drainage construction, and latrine construction, either direct or through subsidies. But no significant reduction of open defecation was observed.

It seems that the problem of open defecation does not find its roots in poverty or limited income, but is strongly linked to local practices, lack of awareness, and lack of interest for sanitation programmes imposed on the communities. Open defecation can only be eliminated with a decision made by the individuals and their families, through improved knowledge, available resources, social aspirations and local solutions owned by the community.

To address these causes, Action Against Hunger, with the support of the EU's Humanitarian Aid and Civil Protection department (ECHO), implemented a project combining nutrition, water, sanitation and hygiene activities in two of the worst affected districts of Sindh Province, Badin and Tando Muhammad Khan. The project provided critical nutrition treatment services and improved access to water and sanitation facilities combined with hygiene education and capacity building. This case study documents the provision of subsidized Easy Latrines supported by an integrated sanitation marketing program implemented in districts Tando Muhammad Khan & Badin, in an effort to adapt locally this innovative solution successful in other contexts.

Four types of practices are observed regarding defecation in rural South Pakistan: open defecation in fields and bush, defecation area in the compound of the household, direct pit latrine, and pour flush latrine connected to a drain, the latter usually reserved to a wealthy class. Most of these practices are a high risk of contamination. Prohibitive costs and lack of knowledge prevent people from looking for alternatives. In this context, the introduction of the Easy Latrine was a promising, safe, affordable and sustainable toilet option.

Easy Latrine: technical design

Initially, the Easy Latrine design was developed by iDE Cambodia and partner organizations. It worked successfully to provide the marginalized and poor communities. The concept, linked with sanitation marketing, was considered a very successful low cost sanitation product in Cambodia. The Easy Latrine is based on a usual pour flush latrine with alternate pits, but it received some technical improvements with designers and engineers, notably to reduce the cement quantities, thus its cost. But the real difference with other latrines is that it is provided as a “ready-to-use” kit, with pre-casted parts that can be purchased and installed on the same day by a local supplier.

Action Against Hunger decided to give it a try and adapt it to the Pakistan context, considering the availability of material and acceptability of the local community.

The concrete slab embedded with a porcelain pour-flush squat pan is connected by a drainpipe to one of two offset pits lined with concrete rings. Liquid & solid wastes are directed to the pit where the liquids seep into the surrounding soil & the solids are contained. Built on a raised platform to avoid flooding during the monsoon, the two offset pits & the slab are securely covered to avoid surface infiltrations. When the latrine is installed, a superstructure or wall, made from either local material like low-cost mud plaster, sheets or bamboo, is built to ensure privacy.

The filling of each pit is expected to happen after 2 years. The drain pipe is then switched to the second pit. The solid waste in the first pit sits for about two years so it can be safely emptied when the second pit is full. The drainpipe is then switched back to the first pit and the cycle repeats itself.

There were some minor changes from in the original Cambodian's design to adapt it to the squatting pans available and used in Pakistan. Additionally, the concrete rings were kept on a mix with ratios rich in cement due to high salinity of the soil and high water tables in the region. The concrete mix was traditional, and didn't reduce the quantity of materials by using organic matter as it was tried in Cambodia.

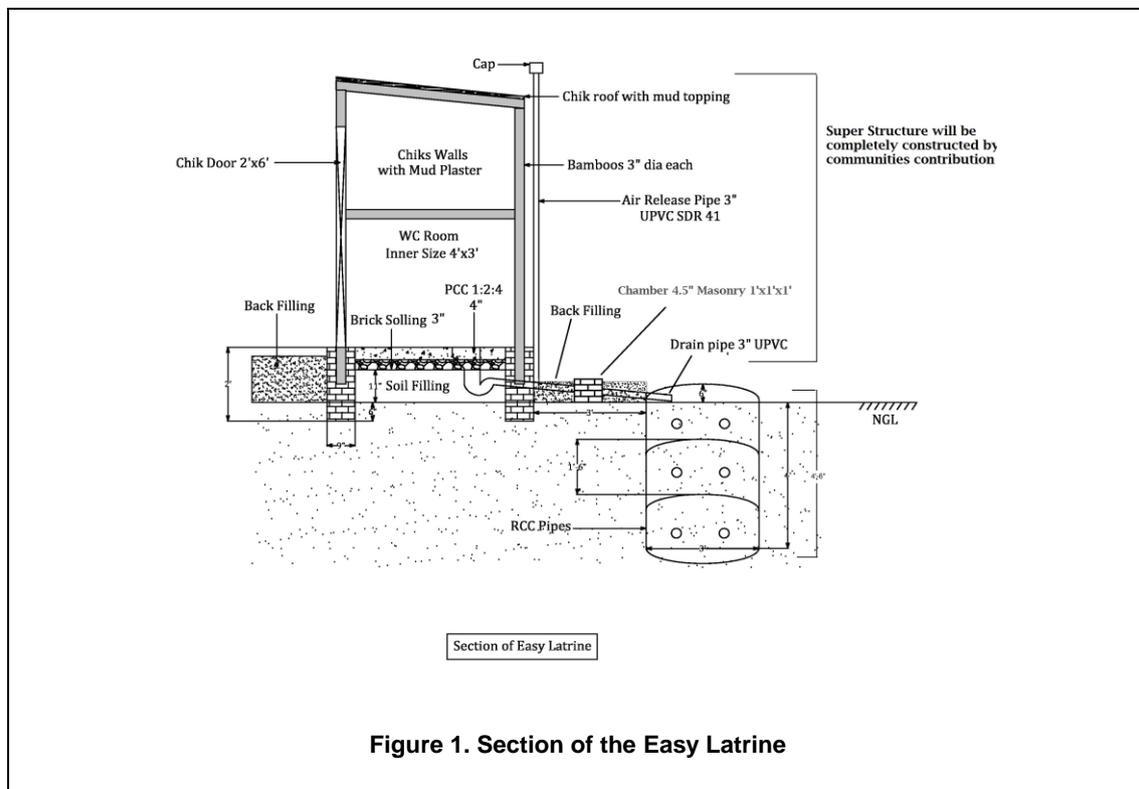


Figure 1. Section of the Easy Latrine

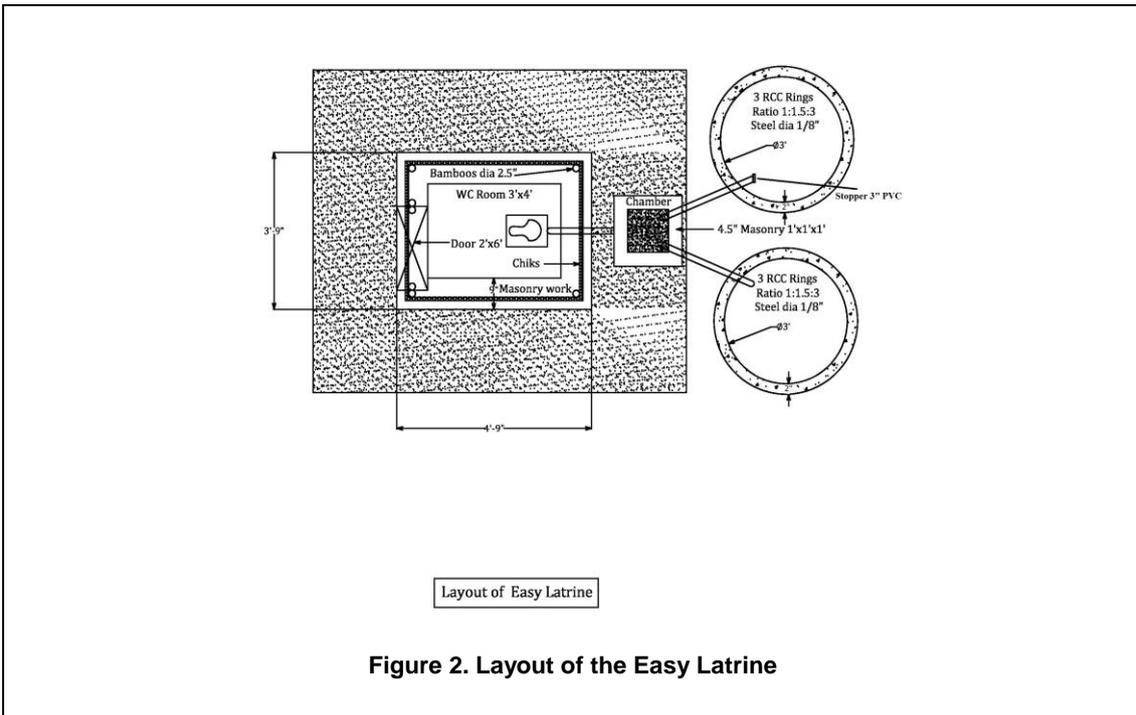


Figure 2. Layout of the Easy Latrine



Photograph 1. Easy Latrine construction

Source: Action Against Hunger-Pakistan

Project approach

The Easy Latrine is supported by a program combining social marketing and involvement of stakeholders.

Sanitation Marketing considers households as empowered consumers rather than just beneficiaries of the project. It is an emerging field that combines social and commercial approaches of the market to assess and gauge the consumer needs and preferences for sanitation solutions, the supply chains for sanitation related products, the demand for low cost sanitation products, and the policy to regulate the sector.

An assessment was conducted to provide a solid understanding of what creates household demand for improved sanitation in the targeted areas, the capacity of local service providers to supply sanitation products, materials and services, and how both the consumers and suppliers access and transmit the information.

Governmental administration, local authorities and other stakeholders were involved to ensure that a commercial approach was supported and gather buy-in from local communities. Local vendors would provide the material for the Easy Latrines, such as slabs, pans, pipes, etc. Local construction entrepreneurs were encouraged to receive trainings on building the elements of the latrine, to submit offers to the project, and to propose their services to the population to deliver and build the latrine for interested customers.

To promote the Easy Latrine, a campaign was launched by Action Against Hunger through the diffusion of pamphlets carrying messages on diseases, financial and physical impact, benefits of adopting improved sanitation options, and contacts of vendors. Panaflex banners and billboards with promotional messages were posted in communities and markets. An exhibition was organized in the district, and prototypes of Easy Latrine were displayed. A radio advertisement was also aired on the local FM to promote the product and create awareness of safe excreta disposal.

The initial chosen approach was to subsidize the latrine for vulnerable households benefiting from the project, with the household responsible to make every arrangement directly with the local suppliers. The subsidy covered the necessary materials, transportation and installation labour. Beneficiaries are responsible to cover the digging of the pit, then for the superstructure. The suppliers need 7 days to prepare the set necessary for the latrine, but as an on-going process they usually keep stock to meet the demand quickly. The excavation and installation of the Easy Latrine at the household requires 3 days.

The Easy Latrine project was piloted in 60 villages of Badin and Tando Muhammad Khan. 300 latrines were installed for vulnerable households between June to October 2014 with the financial and technical support of Action Against Hunger.

Findings and way forward

Acceptance by the communities

Traditionally, the majority of the population open defecates, at best in a designated area. At the beginning of the project, communities expressed their lack of money and of technical knowledge to improve their unsafe practices. An evaluation was conducted at the end of the project introducing the Easy Latrines. 74% of the respondents considered this product very useful and declared to appreciate the methodology introduced by Action Against Hunger. They find it low cost and convenient according to the local context. The concept and design of the Easy Latrine was endorsed by the communities. With a potential base of users, it was then important to create a market to propose an offer.

Interest of the market

Sanitation items were nearly unavailable in local rural markets and bazaars, as vendors did not see any profit or advantage for their business.

Initially, when the sanitation marketing and Easy Latrine idea was introduced to local vendors, only 2 vendors showed interest and agreed to keep a sufficient stock of sanitation material in their shops. These entrepreneurs were already in the construction business and selling or installing basic plumbing items. They were required to invest in sanitation material and to be trained on the Easy Latrine construction and provision. The others vendors didn't want to take a financial risk as they were not convinced of the viability of the approach and of the interest of the community for latrines.

Demand and supply creation

Convincing the communities of purchasing material was indeed a hard task. The subsidy approach aimed at creating the link between communities and vendors, through the support of the most vulnerable households as decided between the programme team and the local community through consultations and humanitarian criteria.

The persistent mobilization and promotional campaigns showed successful and the eligible subsidized households claimed their vouchers and contacted the 2 suppliers for the installation of the latrine. The vendors delivered the expected service and kept supply for sanitation and latrine construction in their outlets.

Witnessing the success of Easy Latrines in the area, 3 other local vendors took the initiative to enter this market and to procure materials for Easy Latrines.

The Easy Latrine is now a well-known product available on the market and that households want to have.

Sales and results

According to the 2 local vendors who accepted to partner with Action Against Hunger and installed 300 latrines through the project, the demand for Easy Latrines is increasing day by day.

As of December 2014, Javed Awan has already sold the material for 460 Easy Latrines on top of the initial Action Against Hunger's input. The second supplier, Abdul Aziz, claims to have sold more or less 800 Easy Latrines. However, most of the Easy Latrines they sold were subsidized by other local or international NGOs interested by the approach.

The additional vendors who started to enter the market did not provide information.

The demand for Easy Latrine is therefore now strong in Badin and Tando Muhammad Khan districts, even if the sales are mainly subsidized by external actors.

Although communities think the product is good and worth investing, Action Against Hunger believes that the current price is too high for most households for a direct purchase.

At the end of the project, these key findings, fueled with the additional knowledge coming from Cambodia, yielded some reflections on improving and strengthening the approach. The main ones are presented in the following section.

Way forward and discussion

Price: To lower the cost of the Easy Latrine to better match the purchasing power of households, the cost of the concrete rings used for the pits need to be reduced. The concrete mix is currently rich in cement to avoid collapsing and issues with soil salinity. Engineering studies will aim at revising the design and reducing the quantity of materials, using alternatives such as cheap local materials, organic matter, etc.

Regulating and involving every stakeholder: With the high demand for Easy Latrines reported by the 2 vendors, and the launch of other entrepreneurs, the oversight by regulating authorities is critical, to ensure that the product addresses its objective of safe containment of excreta, and its safety of usage. Monitoring of the latrine construction is also important, as the suppliers have sold or committed for high numbers of Easy Latrines and need to deliver the full service of installation to their clients. Finally, the involvement of every stakeholder is of major importance in the marketing of the Easy Latrine: suppliers, authorities, key champions in communities, and NGOs should raise similar messages and approached to ensure that there are no discordant voices and initiatives confusing customers.

Subsidies: A different approach has been used in the Pakistan case study compared to Cambodia, with subsidies introduced to launch the market. As a humanitarian organization, Action Against Hunger is mandated to support the most vulnerable population in the short term, when a pure market approach would usually start by early adopters and wealthier customers. There are pros and cons for both subsidized and non-subsidized approaches, and an analysis should be done to ensure that the market will remain sustained by local purchases.

Micro-credit: Continuing to follow the development of the sector in Cambodia and in the world, a next step will be to consider the introduction of micro-loans and the involvement of micro-finance institutions. Some lessons already exist from Cambodia, one being the difficulty to convince these institutions to loan for a facility with no return on investment. The involvement of all stakeholders will again be instrumental in this evolution of the approach.

Usage: A longer term monitoring of the latrine usage will be essential to ensure that it is contributing efficiently to the reduction of open defecation. The goal is that the entire family uses the latrine, and in a society where gender roles and attributions are strongly segregated, this may result in only some family members using the latrine – women and children for example.

The maintenance and proper use of both pits will also require follow-up.

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