Introduction and Background

Latrine-building projects have been a popular form of development assistance for decades. These types of projects act as “hardware subsidies”, where the desired sanitation technology is installed by the Government or large NGO relatively free of charge to the recipients, often lacking any form of outreach or community engagement, with the belief that, “if you build it, they will come”. But do these types of programs actually work? Abundant evidence exists for hardware subsidy projects that fail in the long-term, due to no personal motivation or ‘ownership’ of the recipients for the facility. Too often, follow-up studies to these types of projects find the latrine having fallen into disuse, due perhaps to lack of understanding of proper maintenance procedures or lack of desire by the recipients to use it.

Recognizing this, development agencies are coming to the realization that alternative approaches to promoting proper sanitation are needed. These include the Community-Led Total Sanitation (CLTS) movement, which focuses on educating people –especially communities practicing open defecation – about the real risks their unsanitary practices pose to them and essentially ‘shaming’ them about it enough to inspire in them the motivation to go out and build or purchase their own improved sanitation facility. Most recently, a group of development NGOs in Cambodia decided to implement a different, market-focused, approach, which they have termed ‘sanitation marketing’. The idea of the approach is to bring together three elements deemed crucial to sparking a demand for improved sanitation products in low-income people who would otherwise have little interest in them: 1) appropriate designs for low-cost latrines, 2) the provision of business training to interested local sanitation entrepreneurs, and 3) the effective marketing in the community of sanitation as a desirable purchase priority. With low-cost latrine designs that meet the needs, wants, and desires of the consumer, with properly trained and equipped local businesses to sell this design and make money, and with a populace motivated by effective marketing to value a latrine as an important purchase, a sanitation program can expand and spread like wildfire with very little NGO intervention and no hardware subsidies. Soon more businesses are starting up, seeing the profit to be had, and are offering new designs and new marketing slogans to attract even more customers, which, in turn, attract even more customers as residents grow envious of their neighbor’s attractive new latrine.
Determined to demonstrate the effectiveness of this idea on the ground, USAID and the Water and Sanitation Program of the World Bank (WSP) funded International Development Enterprises (IDE), Lien Aid, and the World Toilet Organization (WTO) – three large development NGOs – to collaborate and develop this sanitation marketing program in rural Cambodian provinces, by working to bring together the “design”, the “training”, and the “marketing”.

Project Purpose and Objectives

This project has three main components: 1) developing an innovative, low-cost new latrine design, 2) undertaking a demand-generation campaign for improved sanitation, and, simultaneously, 3) undertaking a supply-chain strengthening program for local masons and entrepreneurs. The purpose of these tasks is to foster sustainability and affordability in the sanitation marketplace in a way that inspires large numbers of Cambodians who currently do not use improved sanitation to invest in it for their households. The specific objectives are to: 1) motivate and sustain changes in sanitation, water, and hygiene behaviors, 2) create consumer demand by addressing barriers to consumption and increasing knowledge of water and sanitation products and services, and 3) improve supply by increasing access to safe, sustainable, and affordable water and sanitation products and services. As the project is currently ongoing, the current interim goal for Lien Aid & WTO is to reach 11,000 latrine sales through up to 50 private sector suppliers in 2011, in the Provinces of Kampong Speu, Kampong Cham, and Takeo. The first goal of IDE was to have 10,000 latrines sold in Kandal and Svay Rieng Provinces before April 2011, which was surpassed already in January 2011.

Partners and Funding Distribution

The main funding agencies for the project are USAID-Cambodia, through its Micro, Medium, and Small Enterprise (MSME) Project, and USAID’s Regional Development Mission – Asia, through its WaterSHED Asia Partnership, as well as the Water and Sanitation Program of the World Bank. The executing agencies are the NGOs IDE, Lien Aid, and WTO, who were the main groups designing the latrine and carrying out the IEC on marketing and supply-chain. Additional support is being provided by the Cambodian Ministry of Rural Development, the NGO GRET (who assisted in the latrine design), the WaterSHED Asia partnership, and the provincial governments and commune councils of the 5 provinces targeted to date (Kandal, Svay Rieng, Takeo, Kampong Speu, Kampong Cham).
Project Activities

This project is still ongoing, having begun in approximately March, 2009. The project activities to date have included: 1) developing an attractive, low-cost latrine design to sell for $35USD, dubbed the “Easy Latrine” (which began prior to the project in 2007 by IDE), 2) early surveys on identifying and developing market-based mechanisms for sanitation and identifying potential private sector pioneers of the low-cost latrine, 3) training these pioneers in latrine production and sales in pilot areas, 4) trialing a savings-group mechanism in a pilot village to see if loans were necessary to spark demand, 5) when demand for latrines rapidly outstripped supply (showing loans as unnecessary), a rapid expansion of the program, identifying more producers and sales agents to expand the latrine sales and marketing, 6) working with the Ministry of Rural Development to create a package of social marketing tools and methodologies with images and messages that resonate with rural households regarding sanitation and hygiene, and then 7) continuing to expand the private sector suppliers and sales agents (and corresponding latrine sales) in more districts and provinces, beginning in earnest in October 2009, and, during this time, 8) developing new ‘mid-range’ superstructure models for the latrine, for retailing at $40 – 50USD, as well as, most recently, developing an entirely new latrine model that includes a shower, dubbed the “Easy Shower”, for future trialing.

Sanitation Technology / System

As a $35USD latrine, the “Easy Latrine” does not consist of anything special from a technological perspective, other than its price. The model has already won numerous design competitions and gained heavy media attention, most notably being its 2010 winning of the International Design Excellence Award, organized by the Industrial Designers Society of America. As quoted by one of the jurors, the Easy Latrine is “not beautiful, but a beautiful example of ‘design thinking’ employed to harness local knowledge and expertise to solve the problem in an economically sustainable way”.

The latrine itself consists of a concrete slab with porcelain pour-flush squatting pan, an underlying concrete chamber to collect the wastewater from the pan and a PVC drain pipe to channel it down into the pit. The pit consists of three concrete rings (a commonly used product in Cambodia) topped with a concrete lid (but is bottomless) that is buried at an offset to the latrine to a depth of about 1.5m. With a little bit more cash, a second twin pit can be installed to create a ‘fossa alterna’-style system, whereby when the first pit is full, it is topped with soil and the PVC drain pipe is rotated to the other, empty pit. Then, once the second pit is full, the first pit should have composted enough to allow its excavation and reuse, with the composted feces able to be used as a soil additive in farming. In addition to this basic model, villagers can choose to build their own superstructure out of local materials or can purchase a fibre cement board or corrugated zinc model for $40-50USD, as a ‘mid-range’ option.

As for the prospective entrepreneurs, they are encouraged to join the program from the slogan, “invest $3090 to earn $4200 in just 4 months”. The initial investment needed includes a $2000 vehicle for making deliveries, $440 worth of concrete molds, and $650 worth of raw materials for making the latrines (power tools & ash/cement/sand for concrete). The projected $4200 is generated from the sale of 25 of the $35 latrines per week for the first two months, then 50 per week for the following two months (with a second investment of $440 in an additional set of molds). The remarkably low-cost nature of the latrine design therefore allows profit to be made quite quickly, which serves as a powerful incentive for potential business partners.
Figure 1. The Easy Latrine, showing the squatting pan, slab, collection box, PVC pipe, and offset pit of 3 concrete rings and a lid, to be sold for only $35.

Number, Type, and Location of Beneficiaries

This project turns “beneficiaries” into “buyers”. Since there are no hardware subsidies, every household who decides to purchase a latrine is no more of a ‘beneficiary’ than they are beneficiaries of purchasing any other product, which is empowering for the owners and ensures they will take better care of their latrine than if it was just given to them free of charge. In terms of the number of latrines sold, and therefore the number of Cambodians who now have access to improved sanitation, IDE has sold 11,195 latrines as of March 1, 2011 in Kandal and Svay Rieng Provinces, while Lien Aid / WTO had sold 4,990 latrines in Kampong Speu Province as of January 2010, and are now expanding to Kampong Cham and Takeo Provinces in the hope of reaching 11,000 latrine sales in 2011. In fact, Easy Latrine sales have been recorded in 1060 villages already, which includes areas both inside and outside the targeted program provinces. Since the average household size in Cambodia is 5 people, this means that over 100,000 new Cambodians may already be benefitting from improved sanitation. As well, the entrepreneurs who became engaged in creating these latrines have created for themselves successful livelihoods, with their owners already becoming some of the wealthiest people in the villages.

Impacts and Challenges

This project is still ongoing, but its impacts are, without a doubt, already spreading like wildfire through Cambodia and beyond. As mentioned earlier, the innovative latrine design and this project have resulted in scores of media stories from news organizations as prominent as the BBC, and with good reason. Over 100,000 Cambodians are already benefitting from improved sanitation who did not before, thanks to the thousands of latrines already sold by hard-working local start-up businesses and sales agents, who were trained in supply-chain management and marketing by the NGOs of this project. This is also providing great support to the sanitation Millennium Development Goal for Cambodia, which is aimed at having access to improved sanitation, by 2015, to 30% of rural Cambodian homes. As an example of the power of this program, Lien Aid’s initial project communes in Kampong Speu Province – where nearly 5000 latrines were sold by Jan. 2010 – has already increased sanitation coverage from a previous average of 24% to a current average of 42%, greatly exceeding the MDG target already. The same exceeding of expectations is visible in IDE’s work in Svay Rieng and Kandal Provinces, where their target of selling 10,000 latrines by April, 2011, was
already surpassed in January, 2011, with 11,195 having been sold as of March 1, 2011. IDE’s work has already resulted in a 15% increase in latrine coverage and an 800% increase in sanitation business profits, with 69 Easy Latrine enterprises established in these provinces already. 16 of these were created in training partnership with the NGOs, 8 of them were subsequently created as ‘copy-cats’ (learning from these existing enterprises), and the 39 others self-formed later on (a ‘ripple effect’), without any assistance from the NGOs. These enterprises are all being creative with their original products in various different ways, often hiring ambitious salespeople and working to gain every advantage over their opponents, in the same capitalist spirit already applying to products like cell phones and soft drinks.

This increase in latrines is benefitting both human health and the environment. The most common previous practice of open defecation in nearby fields is a very dangerous activity, as the collective feces from all of the villagers undertaking this action pollute both the surface and ground waters and pose major risks of waterborne illness to farmers who work in these fields. With the use of Easy Latrines instead, while not all groundwater pollution is eliminated (since the concrete pit is bottomless and allows percolation of wastewater to the groundwater), it is minimized to a great degree and retained to the immediate areas around the latrine, rather than being spread over a wide area in the fields. This should result in fewer waterborne illnesses in the residents and make their communities cleaner places to live.

Overall, this project has already shown that ‘hardware subsidies’ are not necessary for successful promotion of improved sanitation in Cambodia. Indeed, with nothing more than marketing, a successful design, and training of interested entrepreneurs, the market for latrines among low-income villagers has taken off, with the purchase of a latrine gaining greater value and priority. It is often noted as a curiosity by travelers to developing countries that people may own a cell phone or TV but live in otherwise very basic conditions. This is because of the effective marketing given to these items that convince even the very poor to value them highly. This program is now demonstrating that the same can be done for latrines and shows no signs of stopping.

Photos

Figure 2. An excerpt from a Latrine Building Manual created by IDE for the businesses (left) and one of the businesses constructing a concrete ring for the pit using their pre-purchased mold (right)
Figure 3. A marketing / sales session of the Easy Latrine to local villagers (left) and a proud new owner of an Easy Latrine (right), with a self-constructed superstructure.

References


