

Private Sector Sanitation Delivery in Vietnam

Harnessing Market Power for Rural Sanitation

Making Sanitation Attractive and Accessible for the Rural Poor

In two Vietnam provinces, an international NGO developed a range of low-cost sanitation options and stimulated a network of local masons to market and deliver them to the rural population. As a result, the sanitation access rate increased markedly in the area, even among the poor. This Field Note outlines lessons learned in the process of creating the demand for sanitation and meeting this demand locally.



Subsidy-based, supply-driven interventions have been painfully slow in bringing sustainable sanitation in developing countries, especially among the rural poor.

Executive Summary

In 2003, the international NGO International Development Enterprises (IDE) launched a project to stimulate the acquisition and use of hygienic sanitation in villages in two provinces in Vietnam. IDE developed a range of options that were affordable and appealing to potential customers. IDE then developed, through capacity building, business development support, and credentialing, a local network of masons to deliver these options. To better understand the drivers of sanitation demand, IDE and the masons assessed the consumers' willingness to pay for and perceived benefits of sanitation and then used the assessment results to promote the benefits and availability of the sanitation options through appropriate media channels and tailored messages. Within a year of the project, there was a 100 percent increase in sanitation access compared to the pre-project access rate. Unlike traditional sanitation projects, no capital cost subsidies were employed to stimulate demand. Households of all income levels accessed sanitation, which was greatly facilitated by the masons offering flexible household financing terms. The project highlights the importance of never underestimating a population's willingness to pay for sanitation, provided that quality products and services are offered and are effectively communicated.

Scaling Up Sanitation: A Global Stalemate?

In 2002, the endorers of the Water Supply and Sanitation Declaration (WSSD) pledged to halve the proportion of people without access to sanitation by the year 2015. However, existing interventions have been painfully slow in bringing sustainable sanitation to developing countries, especially among the rural poor.

Most developing countries continue to rely on external aid for achieving national targets for sanitation. For various reasons, they also continue to give greater priority to increasing people's access to water supply rather than to sanitation and improved hygiene. Standardized government or donor-sponsored models are the most prevalent models for sanitation interventions. Such models, which are infrastructure-focused and dependent on subsidies for latrine construction, have a poor record in

effectiveness of use, efficiency of investments, sustainability of services, and scaling up access.

Alternative models are now emerging, which challenge the efficacy of these subsidy-based and construction-driven approaches to sanitation and hygiene improvement. These alternatives offer a market-based approach, which can be more sustainable, cost-effective, and easier to scale up. This Field Note looks at the recent application of such an approach in Vietnam.

Rural Poor As Customers, Not Beneficiaries

Emerging evidence from Vietnam suggests that when using a market-based approach, it is possible to not only accelerate access to sanitation for the unserved in rural areas and enhance the sustainability of the sanitation services delivered, but also deliver services more efficiently than when using a non-market approach.

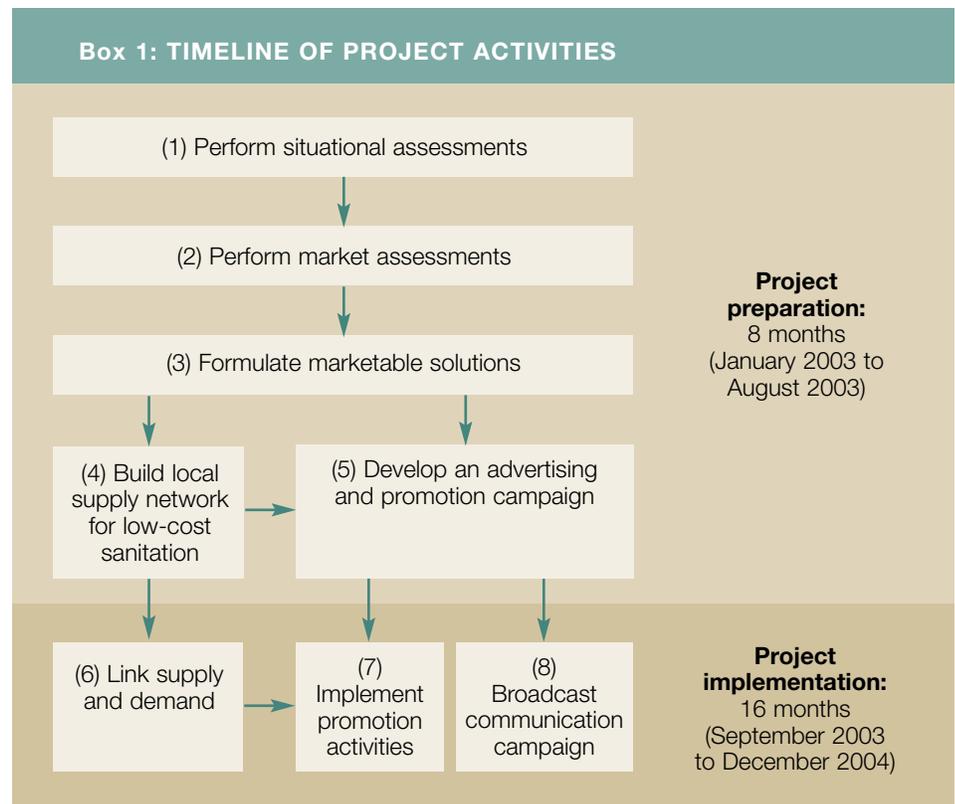
From September 2003 to December 2004, the international NGO International Development Enterprises (IDE) implemented a rural marketing project¹ targeting about 54,000 households in the provinces of Thanh Hoa and Quang Nam on the central coast. According to the government's criteria, nearly one-fifth of the households in the two provinces are "poor"² and thus receive social assistance. This poverty situation poses a significant challenge to delivering sanitation services in the area.

The project examined two research questions: (a) whether rural families will invest in latrines when a range of low-cost models are available from local private sector suppliers; and b) to what extent targeted promotional campaigns can influence consumers' decisions to invest and change sanitation practices (See Box 1 for the project timeline).

Unlike the conventional approach normally applied in Vietnam, the piloted approach was fully market-driven, offering customers no capital cost subsidies and using external resources for catalyzing market improvements for sanitation and promotion of improved hygiene behaviors. Briefly, it focused on stimulating weak rural sanitation markets and helping these markets become viable (Box 2).

The Potential of a Dormant Rural Market

In spite of an enormous potential to deliver sustained service improvements, the existing rural market for sanitation services in 2003 in the two provinces remained undeveloped. IDE conducted its preparation phase from January to August 2003. The situational survey conducted at the beginning of this phase showed that only 16 percent of the rural households in the project area owned hygienic latrines, demonstrating a potential market for sanitation. However, the demand for sanitation was undeveloped and highly seasonal, varying with agricultural income flows. Communication and transportation



facilities were poor, leading to increased transaction costs, and small-scale sanitation operators lacked access to support services to run their businesses profitably.

IDE's initial market assessment showed demand constraints—the lack of reliable product information to influence spending decisions as well as the lack of desirable product options and suppliers. Less than 10 percent of the respondents in the baseline survey were aware that sanitation facilities could cost less than VND1 million (approximately US\$65). Even if they knew the price, less than 10 percent were willing to spend that amount to acquire

latrines. Seventy-seven (77) percent of those without a latrine said that they had “other spending priorities,” such as a television or a karaoke set. Yet, by the end of 2004, after 1 year of project implementation, more than 37 percent of the households had each invested up to VND1 million in building or upgrading their household latrines.

Supply-side constraints were more numerous. The community had few competent and reliable masons to build safe and hygienic latrines. IDE's initial assessment of private sector suppliers (including 541 masons) revealed that most

Provincial health records showed that the rate of construction of sanitation facilities was relatively stagnant in both the experimental and the control group communes during the 4 years preceding the IDE project.

Box 2: DIFFERENCES BETWEEN CONVENTIONAL AND MARKET-BASED APPROACHES

Conventional Approaches	Market-based Approaches
Heavy subsidies for capital costs	Subsidies for market development Full capital cost recovery from users
Standardization of models	A range of affordable options
Decision making by external agencies	Users decide what and how to buy
Focus on infrastructure targets	Focus on behavioral targets
Focus on centralized service provision	Focus on diversified local service provision

village masons could not accurately estimate the material costs and the time needed to build a double-vault or a semi-septic tank latrine, the most popular choices in the local communities. Villagers used community health workers and members of mass organizations such as the Vietnam Women’s Union as the primary sources of information regarding latrine designs and hygiene improvement because they saw village masons as lacking credibility in this area.

Few incentives existed for village masons to enter the sanitation business in the project areas. Sanitation was a profitable seasonal opportunity but not a regular source of income for them. Soon after the project started, it became clear that small-scale private sector operators were running their sanitation businesses with very thin profit margins. The lack of profits and incentives created a “subsistence environment” for

small-scale enterprises in rural sanitation, characterized on their part by short-term vision and decision-making and a reluctance to take risks. As a result, the emerging small-scale private sector did not offer product experimentation, advertising of product information, or specialized technical assistance of any kind. Masons, therefore, seemed unable to capitalize on or stimulate market demand. There were also no other private or public sector agencies that were willing to undertake these efforts on behalf of the local network of sanitation service providers.

Awakening the Market: The Results

To examine the project’s research questions, IDE selected experimental and control communities at the outset. Using the results

of the baseline survey, IDE matched both types of communities by key socio-economic characteristics and environmental features (Table 1) and selected communities sufficiently isolated from one other so that marketing campaigns could not contaminate the control group. In addition, neither the government nor any other source in the experimental and control group areas provided capital cost subsidies for household sanitation facilities during the project timeframe.

Increased Access to Improved Sanitation

Provincial health records showed that the rate of construction of sanitation facilities was relatively stagnant in both the experimental and the control group communes during the 4 years preceding the IDE project. Between 2000 and 2003, a total number of 5,985 new latrines were built in the experimental group, with an average number of 1,496 latrines built each year. At this rate of annual increase, it would have taken more than 30 years to achieve total sanitation in the 30 communes.

Project implementation began in September 2003. In the next 14 months, 7,715 new latrines were built, entirely from household investments. Of these, 6,251 were built during 2004, representing more than a fourfold increase over what was the annual average until 2003 (Figure 1).

A comparison of the experimental and control groups shows that household access to hygienic latrines grew in both groups, but the increase was more dramatic in the experimental group. Using

Table 1: Key socio-economic and sanitation-related indicators in the project areas

Communities	Number of Households	Poor Households as % of Total Population	Annual Income per Capita (US\$)	% of Total Households Owning Safe Latrine
Experimental Group ³	53,886	19.1	125.7	16.0
Control Group ⁴	5,440	19.7	141.6	18.3

Source: Population Monitoring Records, District People's Committee and District Health Centre, December 2004 (Ministry of Health of Vietnam). "Poor" as defined by the Government, see footnotes 5 and 6.

the December 2002 access rate as the baseline, by December 2004, the experimental group communities achieved more than a 100 percent increase in household access, whereas the control group achieved only a 41 percent increase (Figure 2).

No Subsidies Needed for Capital Costs

Perhaps the most important finding was that the acceleration of demand among the experimental group was achieved without the use of capital cost subsidies. The

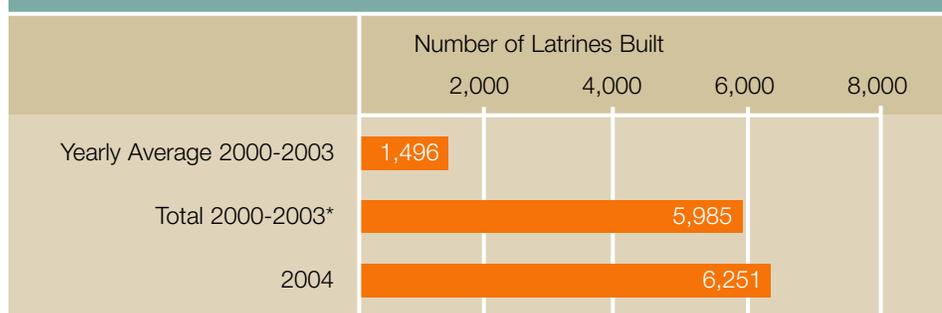
average per capita annual income in the project area (US\$126, December 2002) was appreciably lower than the national average (Vietnam's Gross National Income per capita was US\$480 in 2003, using the Atlas method). Yet, with locally available market innovations that suited their lifestyles, and most importantly, demand created through effective communication, rural households in the experimental group did not need subsidies to access improved sanitation. During project implementation, rural households bought 7,715 improved latrines from local small-scale service providers at full market cost.

Reaching the Rural Poor

Global experience shows that the affluent tend to be the first investors in sanitation improvements and the poor often gradually follow their lead. Yet, this project found that even within the first year of intervention, just over half of the "poor" population did invest in sanitation. While the poor households constituted 19.1 percent of the total population in the project area, they represented 10.7 percent of all the latrine buyers during IDE's project implementation period. They even spent a marginally greater proportion of their annual income on sanitation than did their more affluent neighbors (Table 2).

For project monitoring purposes, IDE classified the poor according to the Vietnam government's definition of households eligible to receive social assistance from the government⁵, and identified as such by their communities. To be eligible to receive this assistance, a household had to show a monthly income per head of less than VND100,000⁶ (about US\$6).

All latrine buyers in the project area invested an average of US\$66 (about

Figure 1: Latrines constructed in the project area


Source: Population Monitoring Records, District Health Centre, December 2004 (Ministry of Health of Vietnam).

*IDE's project implementation phase began in September 2003.

³ Thirty (30) communes distributed evenly among six districts (five communes each) in Quang Nam and Thanh Hoa.

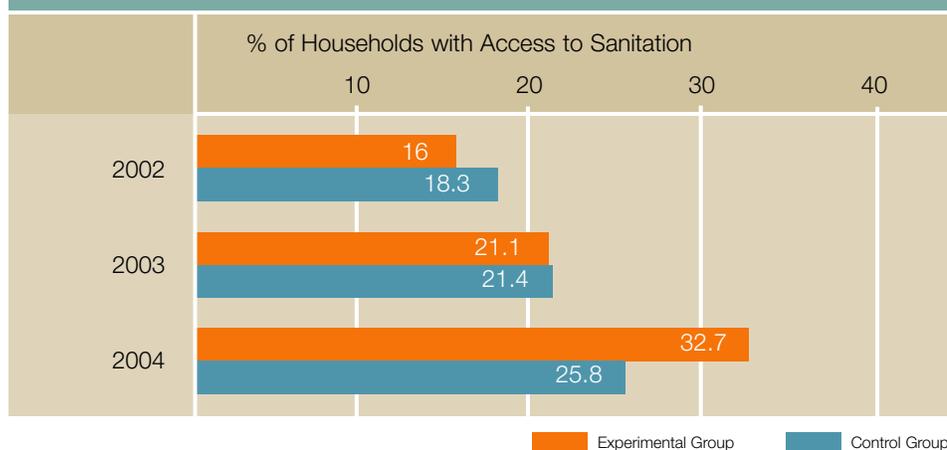
⁴ Three communes in three districts in Quang Nam province.

⁵ "Decision of the Prime Minister approving the National Strategy for Hunger Eradication and Poverty Reduction for the period 2001-2005" (Decision number 143/2001/QĐ-TTg - 27th September 2001).

⁶ "Decision of the Minister of Labor, Invalids and Social Affairs (MOLISA) on adjusting the criteria for identifying poor households for the period 2001-2005" (Decision number 1143/2000/QĐ-LDTBXH).

For project monitoring purposes, IDE classified the poor according to the Vietnam government's definition of households eligible to receive social assistance from the government, and identified as such by their communities.

Figure 2: Household access to hygienic latrines



Source: Population Monitoring Records, District Health Centre, December 2004 (Ministry of Health of Vietnam).

11 percent of their average annual household income) per household in improving their sanitation facilities. Among those, the poor households invested an average of US\$11 less. Their investment of US\$55 represented 15 percent of their annual household income (Table 2). While this may suggest that the poor chose cheaper technologies, in reality the factors that influenced choice of latrine types were the family's need to use night soil

(composted feces) as fertilizer, the type of soil, and the availability of a nearby reliable water source.

Making Sanitation Affordable

Reportedly, latrine costs ranged from US\$32 to US\$97. Loans were available from the Vietnam Bank for the Poor through the Farmers' Union and the Vietnam Women's Union. Yet, none of

the households in the project area applied for loans from these official sources since these were for a minimum amount of approximately US\$200 and entailed much paperwork. Rural households often regarded these formal credit sources as better suited for income-generating investments such as a fishpond or livestock.

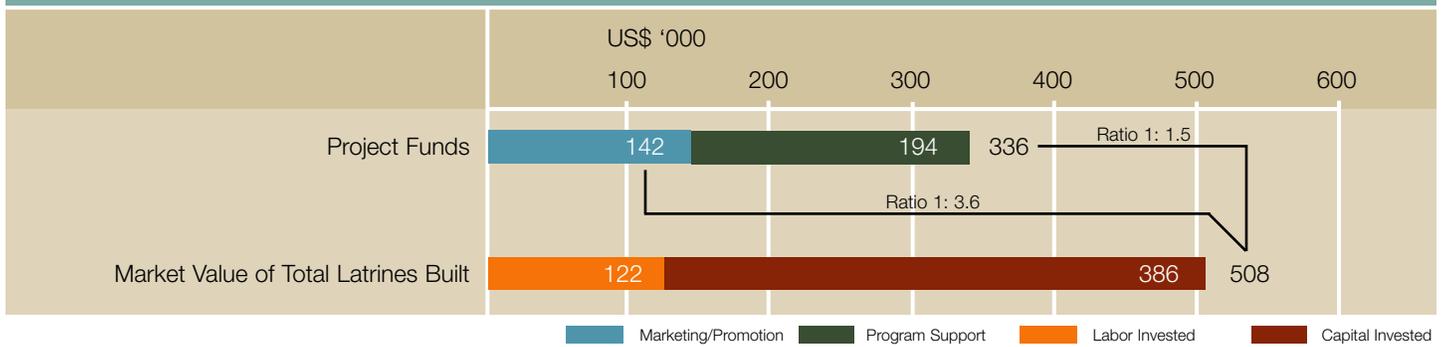
Approximately two thirds of the poor latrine buyers used their own savings from agricultural earnings. The rest borrowed from affluent relatives and friends dwelling in the cities. The poor buyers also routinely deferred payments to the village mason, paying 50 to 70 percent of the mason's dues over a period of about 6 months. In addition, many of them purchased or progressively upgraded their latrines with phased investments. The project allowed for phased upgrading of latrine facilities when cash was available from seasonal agricultural earnings. Women formed voluntary groups to encourage members to maintain their payments and assist one another in mobilizing funds from informal sources when necessary.

Table 2: Investment in sanitation in relation to annual household spending

Population Category	Per Capita Annual Income (US\$)	Household Annual Income (US\$)	Average Household Investment in Sanitation (US\$)	Investment as % of Annual Household Spending
All Latrine Buyers	126	592	66	11.1
Poor Latrine Buyers	77	362	55	15.2

Source: Population Monitoring Records, District Health Centre, December 2004 (Ministry of Health of Vietnam).

Figure 3: Project investment in relation to the household investment leveraged



Source: Population Monitoring Records, District Health Centre, December 2004 (Ministry of Health of Vietnam).

It is important to mention that the latrine costs stated above reflect the costs of demonstration models constructed during the formulation phase of the project. In reality, the costs of building a latrine were significantly reduced, as households contributed their own labor to the construction of the facility or managed to recycle construction materials from other sources. The village masons worked with prospective buyers to explore all such avenues to reduce costs.

A Cost-effective Approach

A characteristic of the market-based model is its ability to leverage private sector resources and stimulate local economic activity. Within the first year of the intervention, the market value of capital cost investments from rural households (US\$508,353) already well exceeded the total funds utilized to catalyze the local sanitation market (US\$336,625), representing a household investment-

leveraging ratio of 1:1.5 (Figure 3). For every external dollar (US) spent for business development support and marketing, US\$1.50 of household investment was generated, of which, US\$0.36 went to the local network of masons and the remaining US\$1.14 to rural construction material retailers. If only the marketing and promotion costs (US\$142,243) are considered, the household investment leveraging ratio was as high as 3.6. Marketing and promotion costs are more indicative of the costs of replicating or scaling up the program, once initial business development has been completed.

At the end of the first year of intervention, the external funds used to launch the local industry and begin the private investment process stood at 40 percent of the investment generated. This can be considered as a 40 percent external subsidy that will fall further with emerging economies of scale as more buyers (and also sellers) enter the market. Such a subsidy covers the one-

time business development expenses using professional marketing expertise, which is often costly but essential for sustainable market development. However, once the market is set up, such a subsidy is no longer needed since only the promotional costs continue, and even local service providers can absorb these costs as the market grows.

Use of external subsidies for business development and promotion is often more sustainable than subsidizing sanitation hardware, because once demand is stimulated and the market is established, suppliers take over promotion even if external funds are gone. This also means that the consumer does not have to experience a sudden price shock from unsubsidized hardware, which has led to the collapse of many past sanitation programs. Prior to the project, IDE encountered this and other negative effects of subsidizing sanitation hardware in Vietnam (Box 3).

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The Process and Lessons Learned

The project chose to develop the sanitation market in the project areas through three main sets of activities:

1. Promoting the availability of a range of desirable and affordable sanitation improvements of dependable quality
2. Stimulating the demand for sanitation improvements and adoption of related hygiene practices
3. Facilitating linkages between demand and supply.

The following section further outlines the actions that IDE took related to each of the three sets of activities (Figure 4).

1. Promoting the availability of a range of desirable and affordable sanitation improvements of dependable quality

- **Identifying and standardizing a range of options:** Standard options for rural latrines existed in Vietnam before IDE's project. However, the price of latrines varied significantly according to the local availability of construction materials and building services and the suitability of specific technologies. The initial assessments also found that the majority of the prospective customers believed the costs of latrines to be much higher than what the local market actually offered.

In response, IDE developed sanitation options that could offer competitive

benefits at affordable costs through standardizing the choice, affordability, and quality of sanitation options. It identified a range of options that were conducive to local livelihoods, appealing to potential customers, and that could be manufactured locally. IDE made these options affordable through material substitution, design adjustments, and promoting the upgradeability of latrine models (allowing consumers to improve their facilities incrementally, in accordance with what and when they could afford). Finally, IDE systematically transferred these solutions to the local network of small-scale private providers through workshops, training, and printed material.

IDE constructed several latrines as on-site demonstration models in the project areas. These on-site trials enabled IDE to gather customer feedback and assess social acceptability. These on-site facilities provided tangible evidence to the public of achievable cost reductions, which helped dispel myths about high costs. There was a risk of overly positive customer feedback from households who may have participated in the on-site trials to gain a free latrine facility. However, by involving local community leaders and local institutions in assessing the sustainability of the latrines, the project was able to minimize this potential bias.

Pour-flush, semi-septic tank, and septic tank were the three different latrine technologies finally chosen for marketing with variations in design. The options ranged in price from US\$32 to US\$97.

BOX 3: NEGATIVE EFFECTS OF SUBSIDIZING SANITATION HARDWARE OBSERVED IN VIETNAM

- Hardware subsidies created severe distortions in vulnerable markets. They killed potential demand by eliminating user choice and promoting unwillingness to pay for sanitation because they created the perception that sanitation should be fully or partially free of payment.
- Agencies supplying subsidized technologies often had procurement rules requiring multiple quotations, which excluded the possibility of highly localized suppliers from participating.
- When the subsidized technologies were not procured from local suppliers they were inevitably more expensive, and the exclusion of local suppliers prevented the growth of local service provision capacity.
- Hardware subsidies often stigmatized recipients and took away the status-enhancing benefits of sanitation. Recipients were marked in the community as the poorest members in need of charity.
- Hardware subsidies promoted misallocation of scarce resources. Subsidies covering a fixed percentage of capital costs created incentives to purchase the most expensive option to maximize the subsidy.

Table 3 presents the cost breakdowns and how the consumers responded to the final menu of sanitation options.

- Increasing the availability of competent service providers:** Under the conventional approach employed before the project, beneficiaries lost the right to choose what to buy, when to buy, and how to buy, as an externally specified supplier gave subsidized materials to them. Under this approach, once construction was over, further service and spare parts were unavailable. IDE found that the rural businesses were trying to respond to this situation once sanitation projects had ended by serving new customers eager to acquire sanitation facilities and providing owners of existing latrines with services such as upgrading or repairs. These businesses, however, were not commercially viable beyond a very small scale and not competitive enough to offer products of dependable quality.

The project facilitated supporting mechanisms for start up, expansion, and operation of businesses for local service providers. Among the supporting mechanisms, stimulating consumer demand for sanitation options was crucial. Without external support from IDE, private operators would never have been able to develop a marketing campaign, which involved significant research undertakings, communication professionals, and multi-media strategies.

IDE helped small-scale private operators to understand the market size and adjust their enterprise accordingly. This

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Walls can wait -- poor buyers appreciate being able to upgrade in phases

motivated new operators to enter the market and increased the confidence of existing ones to tap the market more fully. This was done both by initiating links between consumers and service providers and between service providers and manufacturers. Through the project, masons gained social recognition as contributors to a better environment for the community. This prompted them to not only enter and stay in the sanitation business but also work for low profits in the remote areas where low population density meant low demand. Another motivating factor for masons to enter the sanitation business proved to be the additional construction business associated with sanitation. For example, the hygiene promotion campaign prompted investments in other construction projects such as pens for domestic animals.

- Building the capacity of service providers:** The project offered training to masons to increase the numbers of trained masons in a given community. IDE assessed masons' existing skills to design affordable, safe sanitation options, and their interest in receiving further training. Almost four-fifths of the screened participants chose to pursue IDE training for sanitation masonry and promotion. IDE ensured that at least three masons per village from different teams (latrine-building teams usually consisted of two masons) participated in the training.

IDE trained village masons in technical and business skills, including assessing consumer preferences and promotion, which enhanced the capacity of private operators to cater to and further develop their own customer bases.

IDE helped small-scale private operators to understand the market size and adjust their enterprise accordingly.

Figure 4: Three main implementation strategies and associated activities

1. Promoting the availability of a range of desirable and affordable sanitation improvements of dependable quality

- a) Identifying and standardizing a range of options
- b) Increasing the availability of competent service providers
- c) Building the capacity of service providers
- d) Endorsing service providers

2. Stimulating the demand for sanitation improvements and adoption of related hygiene practices

- a) Gaining an understanding of customer behavior and drivers of consumer demand
- b) Developing, testing, and delivering the marketing campaign
- c) Mobilizing the community for behavior change

3. Facilitating linkages between demand and supply

- a) Linking market players
- b) Monitoring the quality and cost through competition



Material from the “Mr. Latrine” media campaign featuring the tagline “Hygiene, Civilization, and Health” and the slogan “Be an exemplary person in a cultured village”

IDE learned that capacity building needed to emphasize learning by doing. At the beginning of the project, instruction was provided through flipcharts of sanitation models, engineering construction plans, and latrine mock-ups. During post-training monitoring of the masons’ work, IDE realized that a significant portion of the latrines performed poorly or were overpriced. IDE immediately took

corrective action to retrain masons with a focus on building practical skills in sanitation masonry.

- **Endorsing service providers:** Providing trained village masons with credentials and an endorsement from relevant health institutions at the local level was also critical. Before the project started, prospective customers had expressed concerns regarding the technical

capabilities of village masons as competent providers of hygienic sanitation facilities. Exploratory research revealed that villagers saw the community health station as the most credible authority in matters of health and hygiene. By getting the health authorities to formally recognize village masons who had received training through the project, potential customers’ concerns were significantly allayed.

Table 3: Technology choices made by the total market compared with choices by the poor

Technology Options	Cost of Latrines at Market Value (in US\$)			% of All Latrine Buyers Choosing This Option	% of Poor Latrine Buyers Choosing This Option
	Labor Cost	Material Cost	Total Cost		
Double Vault	15	43	58	17	39
Pour Flush	16	49	65	5	8
Septic Tank	24	73	97	18	5
Semi-septic Tank	16	55	71	48	28
Other (1)	10	22	32	-	1
Upgrades (2)	4	6	10	12	19
All				100	100

(1) "Other" refers to any facility that did not fall into the other technology categories, for example, an improved pit latrine.

(2) Investment to transform an unhygienic latrine into a safe system.

2. Stimulating the demand for sanitation improvements and the adoption of related hygiene practices

- Gaining an understanding of customer behavior and drivers of consumer demand:** The demand for sanitation was constrained by several factors. First, the local population did not prioritize sanitation. There were other things that they wanted to acquire first, such as a TV, karaoke set, or even furniture. Secondly, they lacked access to dependable service providers who could build improved latrines. Finally, they lacked sources of accurate information about sanitation facilities—what to buy, how much it would cost, and whom to buy from. Since fewer than

1 in 5 households had a latrine when the project started, prospective customers found it difficult to gather reliable information about costs and benefits from neighbors or markets and compare alternatives. Moreover, existing latrines in the community usually belonged to the most affluent members and were thus likely to be more expensive. IDE focused on removing these barriers through a communication campaign and rural promotional activities.

Using the baseline research, the project focused on identifying what could be the most powerful motivating factors for prospective customers to invest in sanitation and hygiene improvements. This involved testing

various concepts of benefits with target audiences, identifying what attracted them most, what was not relevant to them, what complied with local beliefs and aspirations, and what obstacles needed to be overcome to make behavior change possible. The results identified the most compelling reasons for local families to want an improved sanitation facility or wish to adopt a specific hygiene practice.

- Developing, testing, and delivering the marketing campaign:** A multi-disciplinary team of advertising professionals and project personnel designed and implemented a behavior-changing communication campaign, carefully developing messages

The project found that the status and convenience benefits associated with having a latrine held a far stronger appeal for customers than did disease-prevention benefits (upon which sanitation programs have traditionally based their promotional efforts).

containing the concepts that seemed to overcome existing barriers to purchasing improved sanitation or changing hygiene behavior, and conveyed these through appropriate rural channels to repeatedly reach a substantial part of their intended audience.

Although this approach is common in private sector promotion and is effective in changing consumer behavior, the project staff found that it was quite alien to development practitioners in Vietnam. Prevailing modes of sanitation communication in Vietnam were still based on health education or the simple one-way transmission of information meant to increase recipients' knowledge but not necessarily change their behavior.

The project found that the status and convenience benefits associated with having a latrine held a far stronger appeal for customers than did disease-prevention benefits (upon which sanitation programs have traditionally based their promotional efforts). Consequently, improved social status and a more convenient lifestyle became central to the strategy to engage target audiences and persuade them to acquire and use latrines. The project used mass and interpersonal media channels in a planned and coordinated manner to carry the campaign messages. Alliances were forged with the organized private sector for sustaining the hygiene communication campaign (Box 4).

Communication was not the only dimension in which social status became a central strategy. Promotional efforts targeted opinion leaders to lead change within communities. Respected villagers who belonged to either the local government network or the mass organization network were the first people to acquire a latrine in the community, thus serving as a social benchmark for the rest of the community.

To address the problem of competing household priorities, promotional strategies deliberately reframed the value of sanitation in relation to other potential household purchases. Vietnamese households in the project area prioritized investment in housing and education followed by income-generating investments. The key project strategy was to first understand what type of purchases a latrine competed with and then appeal specifically to the competing benefits derived from these purchases. For example, a strategic message on a popular radio soap opera capitalized on the concept of social status and family priorities when households owned a TV set, but did not have a hygienic latrine.

- **Mobilizing the community for behavior change:** Central to the marketing campaign was hygiene promotion and community mobilization. Given the prominence of the community and the political structure, mobilizing local leadership proved critical for delivering the marketing campaign and for building consensus on environmental

BOX 4: BEHAVIOR CHANGE CAMPAIGN LINKED TO SOAP MARKETING

As part of the situation assessment, IDE learned that despite high public awareness of preventive practices to break the fecal-oral transmission chain, women's hand-washing practices were far from desirable. IDE thus developed a behavior change communication framework focused on hand washing in tandem with a communication campaign to stimulate demand for sanitation.

Through focus groups, spot checks, and structured observations, IDE identified behavior gaps that became the foundation for the campaign. To sustain desired behavior changes brought about by the campaign, the manufacturers of antibacterial soap and IDE forged an alliance for hygiene promotion. Besides aiming for improvement in hygiene behaviors, the initiative also aimed to convince the organized private sector in Vietnam that targeting the rural customer base means good business. Unilever Vietnam has now mobilized its own resources to pilot a school hand-washing program with IDE. The alliance is based on strategic resource sharing between the partners. Unilever provides funds for promotion and in-kind contribution of soap samples while IDE contributes consumer research information and advice on rural outreach strategies.



A local mason explains latrine options to prospective customers at a village promotional meeting

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sanitation as a priority community goal. The project incorporated hygiene promotion and community monitoring of performance against targets as part of the community management and development plans. Peer pressure was a powerful force for the achievement of behavioral goals among households.

Village contests, which were paid for by community funds, proved to be a persuasive way to mobilize community-wide action. Villages created songs and games on the issue of improved hygiene. The winning villages from each commune competed at the final district-level competition, where the commune health workers judged the contest. They awarded VND200,000 (approximately US\$13) to the winning village at the commune level and VND1 million (approximately US\$65) at the district level.

3. Facilitating linkages between demand and supply

- **Linking market players:** The process of acquiring a sanitation facility can be long and requires several steps, starting from consumer exposure to initial information to the final construction. To influence sanitation-related decision making by households, IDE initiated ways to link consumers and services providers, and thus promote the flow of information between them.

The village mason, as the promoter, retailer of construction materials, and service provider, is the most critical link in the sanitation supply chain. The masons' network built almost all of the new sanitation systems under the project, while the households themselves upgraded their existing latrines. IDE connected the two parties at promotional village meetings, where masons

introduced the latrine options and their variable prices and prospective buyers obtained cost quotations. This exchange allowed transparency of information flow between demand and supply.

The promotion network also served as a mechanism to encourage, supervise, and guide the households during the latrine acquisition process. Village promoters often belonged to mass organizations such as the Women's Union of Vietnam. They targeted potential customers, organized the meeting venues, performed household follow-up visits, served as links between the household and the mason, supervised the construction process, and monitored progress against the initial community target. The project offered incentives to village promoters based on their performance as sales promoters for sanitation.

- **Monitoring the quality and cost through competition:** The quality that providers can offer to customers depends on both their masonry skills and their ability to adjust their services according to customer's needs. Some of the masons took the initiatives to provide guarantees for their services and products for a specified future period. IDE helped build credibility for their guarantees by monitoring customer satisfaction, collecting testimonies, and assessing the quality of the systems built by the masons in relation to the costs. Two factors were found to reduce the potential risk of poor masonry services: 1) the mason was often a member of the local community and needed to

Linkages among players in the supply chain have improved the flow of market information, which is bringing in increasingly more benefits to all stakeholders.

BOX 5: THANH SANG, ENTREPRENEUR WITH A FUTURE

Thanh Sang lives in a village in Thang Binh district, Quang Nam province. Of his eight children aged 3 to 29 years, three work in Saigon. Before the IDE project, Sang and his wife farmed, and he made cement rings for dug wells. With many children to feed and farming land that was sandy and barren, combating hunger was a perennial struggle. Then the market changed. People stopped buying well rings as drilled wells became available. Sang migrated to find wage work like cutting forest wood and mining sand from riverbeds and beaches. However, wage work was seasonal and failed to provide sustenance for his family.

Since he was known as a former ring maker, IDE's sanitation project invited him to attend a workshop on how to build hygienic latrines. Sang learned about building rings for low-cost semi-septic tanks, a technology that his fellow villagers preferred. Sang now felt confident enough to start his own business making such rings. He registered with the local network of masons started by IDE and advertised his availability.

Sang faced initial difficulties in building name recognition and reputation among his potential customers. He sold only 3 sets of rings per month (a semi-septic tank needs 1 set of 6 rings), earning approximately VND270,000 (US\$18) in profits.

Sang then decided to attend the promotion meetings organized by the Vietnam Women's Union, where he found people very interested in discussing hygiene and environmental sanitation matters. Moreover, the commune health workers treated IDE's network of trained masons with respect and recommended him to the villagers. After these meetings, people came to him with orders directly or through the Women's Union. Customers bought the construction materials. Sang took the mold to their houses and made the cement rings at their doorsteps. He started making 10 sets a month, earning VND900,000 (US\$60) monthly.

In June 2004, IDE and the local government organized another workshop in Binh Sa commune for upgrading latrine-building techniques. After that, Sang started making and selling the rings from his home, which enabled him to produce more. He also worked out new payment terms with the retailers of construction materials. By getting 50 percent of the cement on credit, he was able to extend credit to his customers.

With his "new way of doing business," Sang now makes 16 to 17 sets of rings per month, earning about VND1,300,000 (US\$87) every month, an income that has lifted him out of poverty and hunger.

protect his reputation; and 2) male householders usually monitored progress of construction.

Market Developments Resulting from Linking Market Players are Benefiting All Stakeholders

Linkages among players in the supply chain have improved the flow of market information, which is bringing in increasingly more benefits to all stakeholders. Examples in the project areas include customer referrals. Cement shops provide customers with referrals to specific village masons, who refer business to the same shops. This has enabled one-stop shopping by households who simply have to contact the mason who will take on design, procurement, and building tasks. Cement often serves as working capital since it represents approximately 60 percent of the entire direct cost of a latrine. The mason contracted to build the latrine for a household may also refer the customer to another mason who specializes in making cement rings. Box 5 features an example of the impact of such arrangements on the local economy and entrepreneurs.

These relationships have improved the mason's capacity to respond promptly to customer demand, and due to competition among masons, also generated cost reductions for the customer. Service providers in the project area estimate that the final retail price for a septic tank is reduced by 10 to 15 percent when a local producer is available in the local value chain.

The relationships forged between households and masons have led to a number of informal financial arrangements. Frequently the rural household, after having decided to invest in a sanitation facility, invites the mason to the construction site and requests his technical opinion. The mason in turn designs the facility, purchases all the necessary direct inputs for building the latrine, and builds it before asking for payment. Another common approach is for householders to buy the construction inputs or pay an advance for the materials to the mason. This injects working capital into the value chain. Another arrangement is local construction material retailers providing working capital to the masons in the form of materials.

Conclusions

Implementation experience and a recently completed project evaluation suggest that a market-based model was an appropriate strategy for bringing about rapid increases in rural household access to safer latrines and improved hygiene practices in the selected provinces in Vietnam.

- IDE's project successfully stimulated both the consumers' demand for improved sanitation and the capacity of the local market to supply services in response. Within a year of project implementation, rural entrepreneurs were able to recognize the potential of the market and expand. The private sector providers can now continue to serve rural communities beyond the project duration. The masons have

International Development Enterprises (IDE)



A local mason turned sanitation entrepreneur

shown that they can now supply spare parts and provide post-sale services to existing customers, cater to the demands of new customers, and even expand their customer base and business through innovative local promotional strategies.

- The project's experience shows that simply assuming, without carrying out proper consumer research, that the poor cannot afford improved sanitation may lead to inappropriate program strategies, such as subsidizing relatively high-cost latrines. Household priorities greatly influence demand for sanitation. Though rural households in Vietnam often lack a hygienic latrine facility, they may still be able to afford a TV set or a karaoke player. Both the poor and the more affluent can experience constraints in accessing sanitation that are varied due to individual motivations and priorities, which, as this project experience shows,

are fundamentally influenced by the extent to which the local sanitation market is developed. The challenge for sanitation programs is to offer both the poor and the non-poor a range of desirable and affordable options while persuading customers to reorient their priorities, if necessary, so that improved sanitation becomes an attractive "must-have" for every household.

- Many poor countries now rely on foreign assistance for scaling up access to sanitation to meet the Millennium Development Goals (MDGs). Full capital cost recovery under the market-based approach addresses the gap in sanitation financing by drawing in resources from the private sector and consumers. The market-based approach may represent the only viable solution for developing countries to move beyond the stalemate of poor sanitation access and reach the MDG targets.

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- Full cost recovery also offers better hope for sustainability of sanitation investments. When customers consciously choose to purchase a facility representing more than 10 percent of their household annual budget, the likelihood that they properly use and maintain the facility is high. It is not surprising that post-sale services have now emerged in the local market in the project areas. Consumers making such an important investment tend to demand increased accountability from the service providers. Full capital cost recovery may thus finally end the embarrassing legacy of dysfunctional and abandoned latrines that top-down conventional approaches had delivered free of cost or at subsidized costs.

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WSP Field Notes describe and analyze projects and activities in water and sanitation that provide lessons for sector leaders, administrators, and individuals tackling the water and sanitation challenges in urban and rural areas. The criteria for selection of stories included in this series are large-scale impact, demonstrable sustainability, good cost recovery, replicable conditions, and leadership.

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