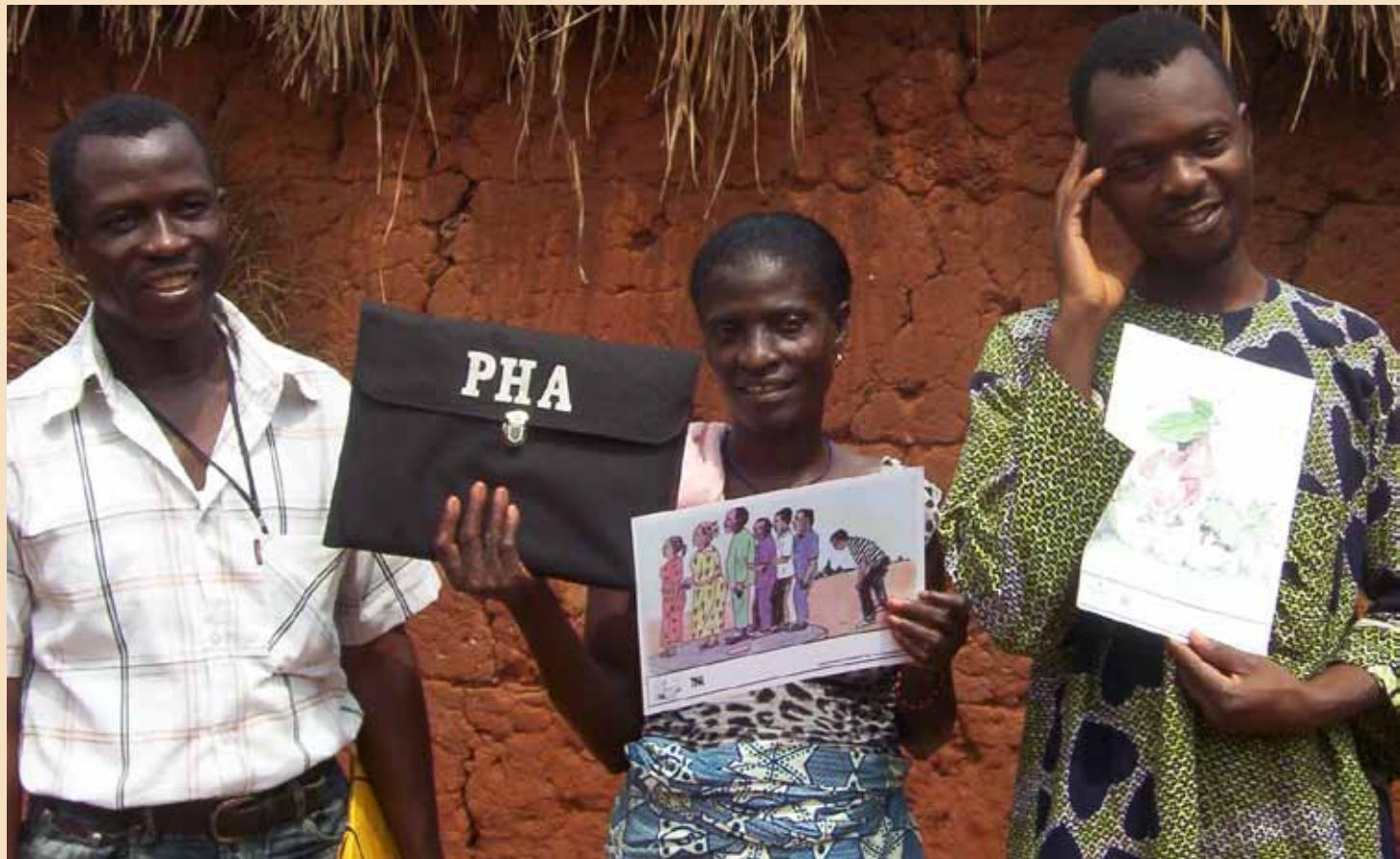


Sanitation and Hygiene Series

Experiences from Rural Benin

Sanitation Marketing At Scale

This field note presents the Benin story and its development of a successful national sanitation marketing program adapted to the rural African context. It provides valuable learning, lessons and innovations for other African countries seeking to develop rural sanitation marketing programs that stimulate household demand at scale and harness the potential and capacity of the local informal private sector market to supply products that respond to consumer needs.



Summary

Sanitation marketing is a sustainable approach to household sanitation uptake at scale. While efforts in Africa to use marketing are underway in several countries, success stories have yet to be shared. In Benin, the Directorate for Hygiene and Basic Sanitation within the Ministry of Health has championed the development and operation of a highly innovative rural sanitation marketing programme. Within the first one-and-a-half years promotion cycle under national roll-out launched in 2005, the programme has resulted in a 10 percentage point increase in improved sanitation coverage from a baseline of 6.2% across 80,000 monitored households. Besides the one in ten households in enrolled communities that has completed construction, a further 2 to 3 out of every ten households is either planning or in the process of building an improved family latrine by accessing market-supplied materials and services. While already impressive these figures likely underestimate the full impact of this marketing intervention for reasons which are explained.

This field note presents the Benin story and its development of a successful national sanitation marketing program adapted to the rural African context. It provides valuable learning, lessons and innovations for other African countries seeking to develop rural sanitation marketing programs that stimulate household demand at scale and harness the potential and capacity of the local informal private sector market to supply products that respond to consumer needs.



Source: CIA Factbook

Introduction

Sanitation marketing is an approach to household sanitation promotion that aims to create sustained and effective sanitation by stimulating household demand for sanitation products and services. At the same time private sector provision of products and services is developed and enhanced, with both activities acting together to result in the establishment of a sustainable

local sanitation industry. In sanitation marketing, there is no subsidy for hardware (e.g. cement, slabs and/or superstructure). It is an approach that builds upon strong understanding of consumer motivations and preferences as well as constraints to latrine adoption. The key aim is to develop promotional and private-sector supply-chain interventions that reflect consumer needs

and desires (see Table 1 for a summary of key elements). The approach is potentially one of the most promising sustainable approaches to dealing with the sanitation crisis and leading to the attainment of the Millennium Development Goals for Sanitation.

Sanitation marketing has been successfully applied in Vietnam (Frias

Table 1: Key precursors and elements of a successful sanitation marketing approach

Create a supportive policy & enabling environment	Stimulate demand for sanitation	Develop private sector supply of desirable and affordable technologies	Facilitate linkages between demand and supply
<ul style="list-style-type: none"> - Include supportive language in key policy documents - Encourage donors to promote market-based approaches - Encourage local-level government support for sanitation marketing - Enact legislation to provide for necessary dedicated financing for sanitation 	<ul style="list-style-type: none"> - Understand consumer behaviour and drivers of demand - Develop, test and deliver marketing messages using effective communications channels - Mobilise community for behaviour change - Understand what household expenditures compete with investments in sanitation - Educate & inform consumers about technologies 	<ul style="list-style-type: none"> - Identify and standardise a range of low cost desirable technology options (r&d) - Increase no. Of trained/skilled local providers - Build marketing & business capacity of local providers - Endorse/certify service providers - Support extension of supply-chains for construction materials and components 	<ul style="list-style-type: none"> - Link consumers with service providers - Improve flow of information between consumers and suppliers - Quality assurance/product warrantee - Increase value for money through increased market competition

Adapted from Outlaw, Jenkins, and Scott, 2007. Opportunities for Sanitation Marketing in Uganda. USAID HIP, AED, Washington, D.C.

2005) and elements of the approach [behaviour change communications, no hardware subsidy, and development of the small-scale private sector to supply household sanitation] were largely responsible for Lesotho's successful government-led urban sanitation program which began in the 1980's (Pearson 2002). Benin provides the first example of a fully developed and tested national rural sanitation program that adapts sanitation marketing to the rural African development context.

This field note shares the story of the development of Benin's highly innovative marketing-based rural sanitation promotion program currently on track to result in the subsidy-free household

construction of improved latrines in 25,000 households across 9 of 12 departments of the country by the end of 2009.

Origins of sanitation marketing in Benin
Benin's national rural sanitation marketing and hygiene promotion programme (hereafter referred to as the PHA from its full French title *Promotion de l'hygiène et de l'assainissement* –translated as 'hygiene and basic sanitation promotion') is operated by the Directorate for Hygiene and Basic Sanitation (DHAB) within the Ministry of Health, with substantial Danish, Dutch and German donor investments. Its beginnings can be traced to 1996 and the PADEAR programme ('Project Support to the

Development of the Rural Water and Sanitation Sector'). Under PADEAR, the government began testing a new approach to rural sanitation promotion utilising social marketing to motivate household demand coupled with sanitation delivery by small-scale private sector providers (local masons) via the market.

PADEAR (1996-1999) was a government programme initiated with World Bank and Danish funding to put into practice the new (1992) National Water Supply and Sanitation Sector Development Strategy (NWSSDS). The NWSSDS called for demand-led, efficient and sustainable water and sanitation development across rural Benin via four key policy principles:

1. Decentralisation of the decision-making process to the community level (allowing households to make informed decisions about their water and sanitation infrastructure)
2. Community contribution to initial capital investment and full contribution to cost recovery of infrastructure, with households responsible for the full costs of their sanitation facilities
3. Prioritisation of efforts to reduce the costs of technologies, both capital investment and maintenance costs
4. Development of the national and local private sector as primary actor responsible for supplying water and sanitation goods and services

The strategy also highlighted the need for systematic hygiene promotion in all rural water supply and sanitation programmes.

The PADEAR social marketing communications campaign utilised mass media (radio and billboards) and direct consumer contact (DCC) activities (games, competitions, give-aways) to disseminate consumer-focused motivational messages based upon non-health benefits of latrines reflecting rural communities' own perceptions of the usefulness and value of latrines.

A network of local masons was trained to build a variety of low-cost latrine models. In order to make latrines more affordable for rural households, the Sanplat latrine technology was tested and introduced as a cheaper alternative, along with design standardizations to the existing VIP single and double-cabin latrine to provide technology choice at lower cost. Training of multiple masons in each District (Commune) was essential

in order to generate local competition and keep latrine prices competitive, while the inclusion of not just construction training but the impartment of basic marketing and sales techniques allowed masons to effectively find their own new customers and market their services. The availability of masons' services was also promoted through the above-mentioned social marketing communications campaign.

The PADEAR¹ pilot was fully operated for about 2 years and worked particularly well when the social marketing messages effectively reached households in local areas with an active trained mason marketing his services.

Scaling up

Following key lessons and successes from the PADEAR-supported rural sanitation marketing pilot, other donors began to experiment with a market-based approach by initiating pilots in other Departments including, Alibori, Borgou, Mono, Oueme and Atacora. Meanwhile Danida, between 2000 and 2004, financed the testing of a number of adaptations to improve and refine the approach. Improvements were designed to bring the promotional activities in systematic direct face-to-face contact with individual households, coordinate access to the network of trained local latrine providers, offer independent technical advice and oversight to households, and refine the IEC (information-education-communications) and marketing communications materials. Refinements to the IEC materials were needed to support the new system of door-to-door promotion and scale-up communications effectively across the wider populations of Atlantique and Zou. Marketing messages used in PADEAR and streamlined elements of the previously

used PHAST (participatory hygiene and sanitation transformation) approach were combined to develop an image-based participatory communications package to address essential hygiene education and awareness along with social marketing of improved latrines for household or compound settings. Four target behaviours were included in the communications package (this field note focuses only on the sanitation component):

1. Building a sanitary latrine
2. Safe hygienic transport, storage and use of improved drinking water supplies
3. General domestic hygiene
4. Handwashing with soap at key times

Box 1 highlights the programme adaptation and development process.



A newly constructed latrine.

Box 1: PHA intermediate phase development phases

Nov 2001 – Mar 2002: Social study

Recognising the need to better understand the rural reality in order to drive the key behaviours promoted within the programme a social study was commissioned to:

1. Explore attitudes relating to hygiene, water, defecation and basic hygiene
2. Define participative ways to improve and promote the health of rural populations
3. Identify motivating and constraining factors to promote and sustain good behaviours
4. Identify channels of communications in villages
5. Identify appropriate criteria for the selection of volunteer health promoters

Methods used to conduct the study included the use of environmental walks, structured observations, structured individual interviews and focus group discussions carried out in local languages.

The outcomes of this research allowed the development of clear motivational image-based messages for delivery via a social marketing approach utilising appropriate channels of communication and strong volunteer health promoters.

July – November 2002: Communications materials development

Following the conduct of research and message development 4 sets of motivational and educational images, based on the participatory communications method of serial images, for use in house-to-house promotion and with community groups were developed by a professional creative agency. These related to:

1. The faecal-oral transmission of water-related diseases and the ‘peril’ of faeces, adapted from the PHAST tool on this topic
2. The promotion of safe water for drinking
3. The promotion of handwashing with soap
4. The promotion of family latrines (focus of this field note) with included four different image sets:
 - a. Motivational messages focussing on the inconveniences of open defaecation and the advantages of having a latrine (see fig 4 for final images)

- b. Low cost latrine designs
- c. Sanplat latrine construction steps
- d. Latrine maintenance and cleaning

To ensure these images were understood and effective, the materials were tested with rural populations before finalization for reproduction and use. Such testing is essential to ensure the success of any promotion campaign.

October – December 2002: Hygiene agent training and training guide development

With the completion of communications materials, cascade training began with the training of Government District-level Hygiene Agents and contracted NGO animators who would in turn train the village health volunteers under their supervision through the use of a training manual developed and tested simultaneously.

Early 2003: PHA pilot test volunteer hygiene promoter training

Once the Hygiene Agents were trained to execute the program, they undertook the recruitment and training of Volunteer Hygiene Promoters across pilot communities.

2003 to Mid-2004: Volunteers and hygiene agents implement pha cycle activities in pilot test villages

The 18 month cycle is implemented in pilot villages in Zou, and Atlantique Departments including a baseline survey of behaviors and sanitation coverage undertaken as part of the PHA cycle of activities.

Nov 2004: External evaluation of pha pilot experience and impacts

The Project contracted with an agency in Benin, CEDA, to undertake an rigorous evaluation of impacts. The evaluation documented a 20 percentage point increase in family latrine coverage across pilot areas, among other improvements in hygiene and water handling practices among households in comparison to the baseline survey, and highlighted the very high value and effectiveness of the visual image materials and the door-to-door promotional and communications activities in stimulating and encouraging households to build latrines without any outside financing. In particular, volunteer hygiene promoters and agents noted the high level of effectiveness of the set of five images expressing inconveniences and advantages of having a latrine in motivating households to decide they wanted to build a latrine.

Full scaling-up of the PHA using the newly refined and tested materials and approaches began in 2005, with the programme launching operations in the Departments of Atlantique, Zou, Alibori, Borgou, and Collines between 2005 and 2007. Expansion aims to cover a further 4 Departments with aim of reaching a total of 64 of the 77 Districts across 9 of 12 Departments of Benin by the end of 2009.

The current sanitation marketing component of the PHA (2005-2009)

operates within a strong policy environment and combines learnings from PADEAR and PHAST to deliver a combination of hygiene and sanitation educational, motivational and supply-chain development approaches to drive rural household sanitation adoption via market-based supply. Table 2 summarises Benin's fulfilment of the basic essential activities necessary for a successful sanitation programme (as laid out in table 1).
Five key sets of players are involved

in delivering the overall Hygiene and Sanitation Promotion Programme (PHA):

1. National Government (DHAB): Leadership and strategic direction, development and provision of promotional and training materials, and monitoring, evaluation, reporting and budgeting
2. Regional Government (SHAB): Hygiene Agents (2 per commune, overseeing promotional activities over 1.5 years in 20 localities at a time) to provide local level leadership and support, train the

Table 2: Key elements of Benin's rural sanitation approach

Creation of a Supportive Policy and Enabling Environment	Demand Stimulation	Supply of Desirable and Affordable Technologies	Linkages Between Demand and Supply
<ul style="list-style-type: none"> - National Strategy and Policy promoting private sector delivery and increasingly explicit about a zero hardware subsidy approach (hardware subsidies to be phased out among all except the very poorest households by end 2008; NGOs to also follow this) - Major donors (e.g. Dutch, Germans, Danish) supporting the program and pushing for zero hardware subsidy approach (the donors have been key drivers influencing sanitation policy) - Ministry of Finance and Health allocating budget and revising job descriptions to support the program - New government position and role of Hygiene Agents created to drive the programme locally 	<ul style="list-style-type: none"> - Combination of educational and motivational messages - Hygiene Education: PHAST faecal transmission routes and barriers tool - Motivational Messages: <ul style="list-style-type: none"> - Avoid Snakes - Avoid Discomforts of Bush - Privacy - Pride/Status - Avoid Flies on Food - Consumer latrine technology information materials (catalogue of options, construction steps pictures, prices) - Messages delivered at multiple levels: <ul style="list-style-type: none"> - Door-to-door - Community Meetings - Radio - Simple picture materials 	<ul style="list-style-type: none"> - Sanplat recognised as cheaper and desirable alternative to the currently available double-cabin latrine - Masons' training provided to develop a local network of providers - Trained masons' certificated and equipped with moulds - Catalogue of latrines models developed and reproduced 	<ul style="list-style-type: none"> - Hygiene Promotion Volunteers (relais) and local government Hygiene Agents able to link households and masons - Hygiene Agents aid household in siting of latrine - Hygiene Agents and Promotion Volunteers monitor quality of mason's work - Hygiene Agents and Promotion Volunteers provide technical advise to households

Adapted from Outlaw, Jenkins & Scott 2007

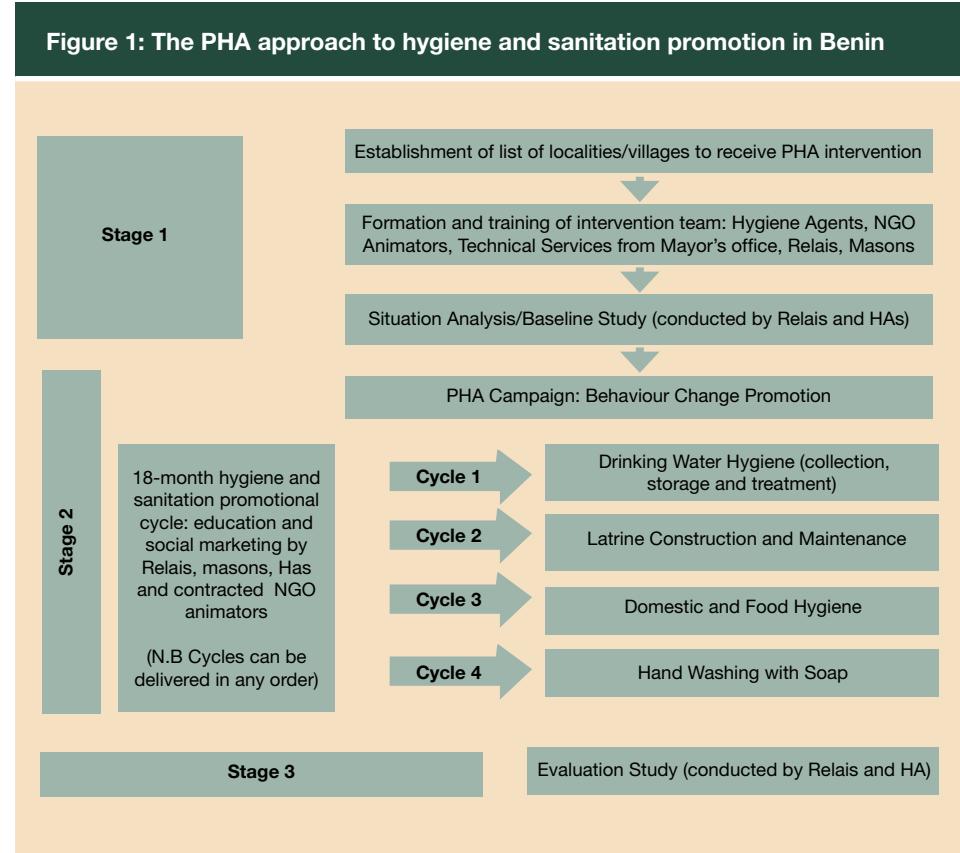
village volunteer hygiene promoters and local masons, gather programme monitoring and impact data, assure latrine construction quality; Supported by Ministry of Health supervisory SHAB-level personnel

3. Volunteer Hygiene Promoters (Relais Communautaire): Community-based latrine education and promotion; monitoring of latrine construction, hygiene behaviour changes, and cycle progress (2 Relais, one male and one female, per community)
4. Masons: Construction of new standardized latrine designs; door-to-door promotion of services
5. NGOs and Hired Animators: Contracted to supplement the program where Government capacity is insufficient by carrying out the same work as a Hygiene Agent in places where Agents are unavailable.

A brief overview of the approach is illustrated in Figure 1 and the sanitation component is now described in more detail. The strategy utilises a community-based volunteer system (hygiene promotion volunteer system) to reach out to households within their communities with an 18-month hygiene and sanitation promotion cycle which incorporates a sanitation promotion module and involves both community meetings and, critically, house-to-house visits. The sanitation module targets households directly with advice, technical information and motivational messages to encourage and promote the construction of household latrines in the absence of hardware subsidies.

To date the strategy has been led centrally by the Ministry of Health,

Figure 1: The PHA approach to hygiene and sanitation promotion in Benin



Direktorate for Hygiene and Basic Sanitation who train two government-employed 'Hygiene Agents' per District whose responsibility it is to train and monitor local masons in improved latrine construction designs and two hygiene promotion volunteers per Locality (a community of about 80-90 households on average) to carry-out the 18-month community-level and door-to-door promotion cycles within their communities; such promotional activity is further supported through local radio announcements and advertisements. Each Hygiene Agent manages the cycle in 10 localities at a time, rotating to a new group of 10 localities every 18 months.

Before the promotion activities begin in a community, the volunteer hygiene promoters produce a community map showing the position of each household in their locality and location of any latrines either completed or under construction (sample shown in Fig 2). These maps, alongside an initial baseline survey (which utilises pictures for each question to aid data collection by volunteers with low literacy), give a baseline latrine coverage and allow for simple yet effective monitoring and evaluation. Each time a new latrine construction is started or finished the hygiene promotion volunteer adds this to their map, along with marks to keep track of household visits. At the end of the

18-month cycle, an evaluation survey is conducted to measure changes in latrine coverage and other target behaviours within the intervention zone during the course of the programme, thus providing a simple indicator of impact when collated by the Hygiene Agents at the District level.

Each volunteer hygiene promotor is given a T-Shirt and a pack of promotional image cards both to incentivise and aid them in their promotion duties. Reflecting the failure of health messages to motivate latrine uptake, these materials use expressive visual images that highlight important household perceived benefits (see Figure 3) of latrine ownership revealed during in-depth formative research conducted among rural households in the Department of Zou (Jenkins 2004):

- Avoiding the threats of the bush (primarily snakes)
- Avoiding exposure to the weather (primarily rain)
- Avoiding the embarrassment of being seen defaecating in the bush (privacy)
- Preventing contamination of food from flies attracted to faeces in the yard
- The pride afforded by having a latrine

Further, building on the successful use of images without words in the PHAST approach, the promotional materials rely on pictures alone, thus avoiding the development of messages inappropriate for the illiterate. To ensure correct understanding and interpretation of the messages and that they were salient, early versions of them were extensively tested with the target rural audience and adapted before final production. Some

Figure 2: Community map for PHA baseline, monitoring, and evaluation



Hygiene promotion volunteers and mason outside a homestesd.

examples of the final print materials are illustrated in Figures 3 and 4.

Following a community-based latrine promotion launch meeting, hygiene promotion volunteers begin house-to-house visits to engage extended families living together directly in hygiene awareness activities. One PHAST tool (fecal-oral transmission pathways and barriers) is used first, followed by discussions of the inconveniences of defecating in the bush and other non-health benefits of latrines using the images in Figure 4. Then, those interested in considering building a household latrine are recorded on a list. Hygiene Agents report that these household visits are critical to the success of the programme, and provide the basis for follow-up visits to support the household through the process of planning and building their latrine. Local-level promotion is complemented through the airing of local radio commercials. Where households are interested in latrine construction, the PHA catalogue of options and prices is shared with the household by the volunteer hygiene promoters along with picture cards showing construction steps and materials needed to build the most low-cost option (see Figure 4). Once the household declares they are ready to begin construction planning, arrangements are made for the representative Hygiene Agent to pay a visit to the household to discuss where to cite the latrine and provide any needed technical guidance. Masons are put in touch with households to begin negotiations on design preferences and price.

In addition to volunteer hygiene promoters' training, masons continue to

Figure 3: Five Latrine promotion images expressing non-health benefits



(Courtesy: DHAB/Unicef)

be trained to ensure an effective local latrine supply and given basic marketing techniques to support the promotional work.

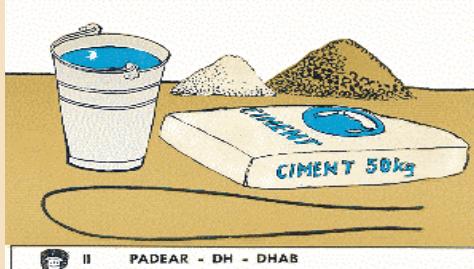
In training, masons are given technical guidance in choosing the correct site for latrine positioning and the construction of traditional latrines from local materials, as well as the Sanplat Latrine (un-reinforced dome slab) introduced under the PADEAR program as the cheapest durable alternative to the more commonly known, but more expensive, rectangular single or double-cabin VIP styles. Thus, masons are able to provide the range of these technology options. They are further trained to offer a range of superstructure options and provided with a 'latrine catalogue' within which various different

latrine technology and superstructure combinations are presented, alongside some of the advantages of and the price range for each.

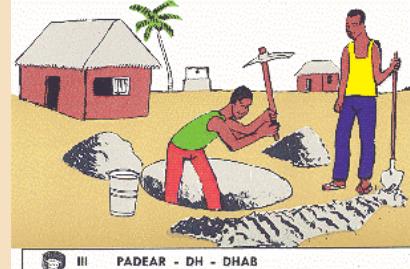
During and again at the end of latrine construction, Hygiene Agents and the volunteer hygiene promoters pay household visits to conduct quality assurance tests, providing households with protection against poor latrine craftsmanship. At this time they will also reinforce the importance of cleaning and maintaining the latrine, using images specifically developed to support this communications task.

This combination of latrine promotion, technical facilitation, masons' training, and quality assurance is essential in order

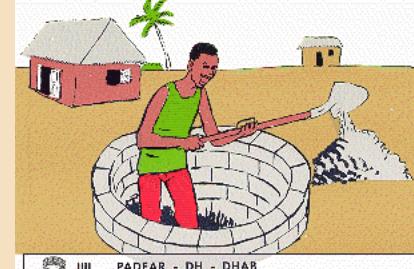
Figure 4: Images used to portray the stages involved in latrine construction



1. Materials necessary for construction of dome slab and foundation collar



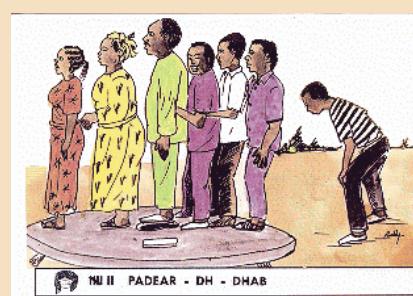
2. Head of household digging slab collar with mason instructions



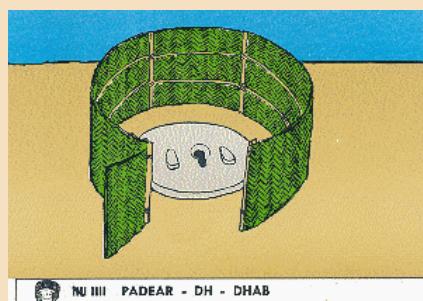
3. After the mason finishes the slab collar, head of household continues digging pit



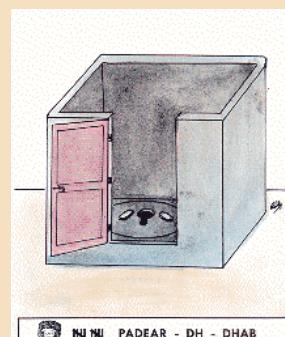
4. After casting the slab, mason instructs household on curing the concrete for 21 days



5. 6 people on the cured slab to test its strength before posing on the pit, supervised by the promoter



Grass matt superstructure



Cement superstructure



Mud superstructure

(Source: PHA Training Manual, DHAB)

to reach households at varying stages in the process of deciding to install a latrine. In some cases households have not considered installing a latrine before and thus must be persuaded to consider it, while in other cases there may be a desire to construct a latrine but inadequate knowledge of technology options or of good local opportunity to do so, as illustrated by the case of the traditional healer described in Box 2.

Programme Impact

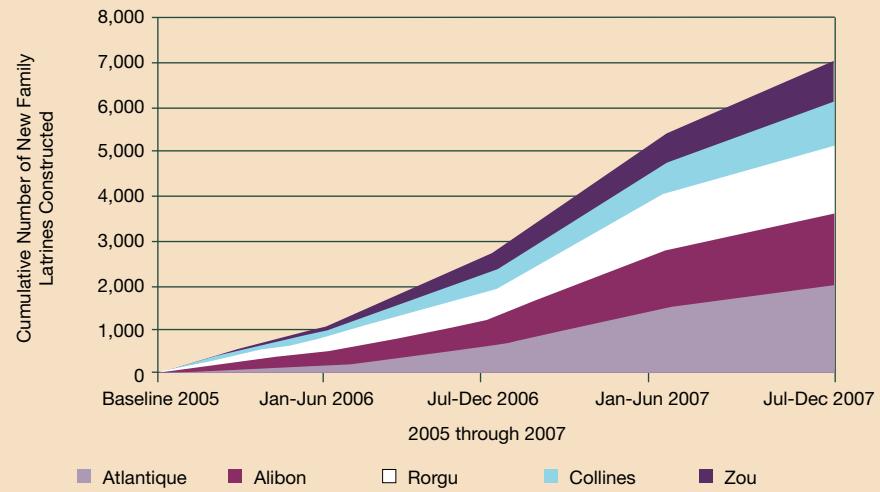
By the end of 2007, the PHA national program was operational in 877 communities (known as Localities in Benin), in 34 out of a total of 77 Districts, across five Departments, covering approximately 372,000 people equivalent to about 10% of each department's rural population. A total of 7,148 new unsubsidized improved family latrines had been built in enrolled communities between the beginning of 2006 when activities began on the ground and the end of 2007. The pace of uptake increased steadily each semester over this period, as seen in Figure 6, registering a 60% increase in the number of improved latrines constructed in 2007 compared to 2006. Over the period, an additional 177 informal sector masons in PHA Districts were trained and certified in the construction of Sanplat, VIP, and double-vault improved latrines, and equipped with low cost light-weight mould kits for on-site construction of unreinforced dome slabs at customers homes.

An analysis of detailed monitoring data available for three Departments shows that the rate of new latrine construction in PHA enrolled communities represented an increase in household latrine

BOX 2: Traditional healer, Adjatokpa locality, Kpomasse commune

This man decided 3 years ago that he wanted to build a latrine – he had many clients visiting him from urban areas and when they asked to visit the toilet he was embarrassed to show them to the bush. Some clients did not return to him after this experience. While he knew he wanted a latrine he did not know what latrine to construct or how to go about getting it constructed. Then in 2006 the PHA began in his village and he was able to gain information about the different types of latrines, their costs and how to go about the construction process. Even then however he was initially cautious, as the un-reinforced dome slab design did not look strong, so he waited. After some time two other households in the village built a latrine and he was able to see that they were good, so at last he decided to get the mason to build one for him. Once he had decided to build the whole process took just seven days and the Hygiene Agent was able to assure him the quality of his slab was good.

Figure 5. Improved family latrines newly built during the first phase of national scale-up in 877 PHA communities across 5 departments.



Source: DHAB PHA quarterly program monitoring and supervision reports.

coverage from 6.2% at baseline to 16.2% by the end of 2007. Thus, by the end of 2007, within durations ranging from as little as 0.5 up to 1.5 years of marketing promotion activities, on average 1 in 10 households across enrolled communities had completed the construction of an improved permanent family latrine using locally available mason providers trained by the program and fully self-financed.

The minimum private investment by households in building their latrine was estimated to be US \$60. Another 2 to 3 out of every 10 households by the end of 2007 were registered as having plans to build or with construction underway.

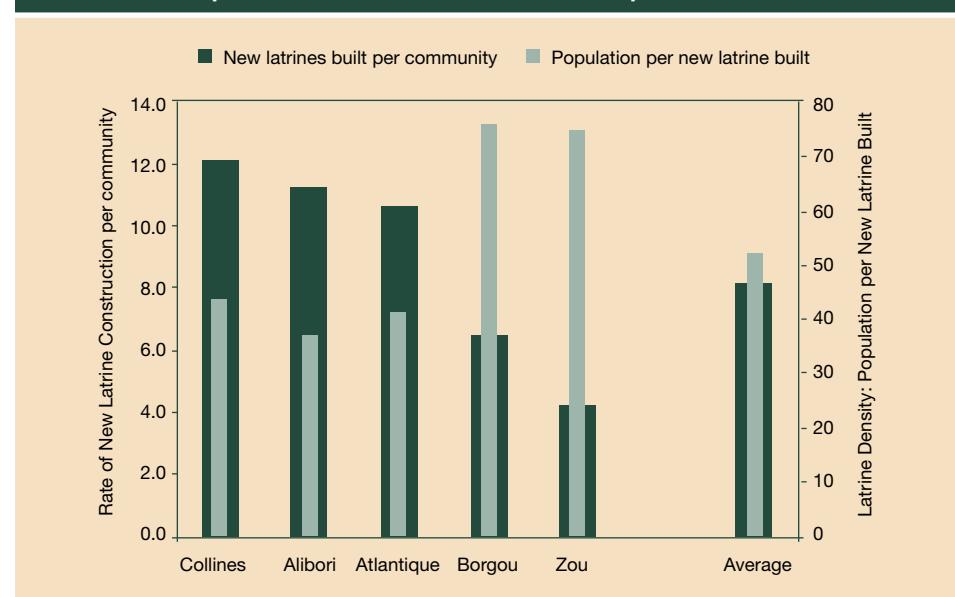
These results confirm the ability of PHA program to replicate across a large national scale, similar high levels of

uptake that were achieving during small scale pilot testing of the promotion package and new approach in 2003-2004 (see Box 1). In the case of Atlantique and Alibori, where detailed data was available to examine coverage changes, the PHA program achieved up to a 15% increase in permanent latrine coverage in under 1.5 yrs in the absence of any hardware subsidy. This impact compares well to the 10-20% increase achievement of the pilot test phase (2003-2004) of the PHA approach.

As seen in Figure 6, the PHA program has achieved solid successes in the national roll-out with the strongest pace of latrine uptake occurring in Collines, Alibori, and Atlantique Departments, at an average pace of 12.1, 11.2, and 10.6 new improved family latrines built in each enrolled PHA community, respectively, over the 2006-2007 period. As indicated above, many more are under construction or being planned by households in these communities.

Detailed data for the Department of Atlantique and Alibori, where the PHA programme has been particularly successful, illustrate this to be no trivial achievement (Table 3). In Atlantique, the PHA cycle began in 194 communities (18,240 households; population 84,947), comprising 9% of the Department's 2006 rural population. By the end of 2007 2,047 new family latrines had been built within the 194 localities without any hardware subsidy, equivalent to a 363% increase in the number of latrines on the ground in just 1.5 years, and an estimated rise in household latrine coverage from 4.2% to 15.5%. In Albiori, the PHA began with 143 communities (10,511 households; population 59,316),

Figure 6. PHA program rates of new family latrine construction achieved across PHA departments and overall for 2006-2007 period



comprising 10% of the Department's 2006 rural population. By the end of 2007, 1,606 new family latrines had been built, translating to a 328% increase in the number of latrines and an estimated rise in household latrine coverage from 6.7% to 22%.

In Zou Department, while activities were scheduled to begin at the same time as in Atlantique (early 2006) start-up was delayed and activities did not commence in most of the 225 targeted communities (comprising 17,327 households, and approximately 11% of Zou's rural population) until as late as the second half of 2007. This and other factors listed below contributed to lower, but still positive rates of latrine uptake in Zou Department.

- The multiplicity of existing organisations promoting latrines using conflicting approaches within the

same localities as the PHA programme resulted in offers to subsidise family latrine construction directly alongside the PHA zero hardware subsidy approach in some villages.

- The geologically difficult terrain (high water table, collapsing soils) occurring in some areas, for which DHAB has not yet identified and/or developed good low-cost latrine designs.
- A lack of dynamism of some field staff and gaps in departmental supervision and leadership during the roll-out.

In Zou, 937 new latrines were constructed by the end of 2007, translating to an increase in household latrine coverage from 7.9% to 13.4% across PHA communities, and the average number of people per latrine down from 51 to 30.

The above official data from initial roll-out are promising and impressive but under-

Table 3: Changes in latrine coverage within PHA localities in Atlantique, Alibori, and Zou between 2006 and 2007

PHA - Atlantique department latrine coverage indicator	2005	2006	2007
Total number of latrines	777	1414	2824
% Households w latrine*	4.2	7.7	15.5
% Concessions w latrine*	15.3	27.8	55.4
People per latrine	108	59	30
% Increase in number of latrines from baseline	Baseline	182%	363%
PHA - Alibori department latrine coverage indicator	2005	2006	2007
Total number of latrines	705	1236	2311
% Households w latrine	6.7	12.5	22.0
% Concessions w latrine	11.2	19.6	36.7
People per latrine	84	46	26
% Increase in number of latrines from baseline	Baseline	175%	328%
PHA – Zou department latrine coverage indicator	2005	2006	2007
Total number of latrines	1377	1607	2314
% Households w latrine	7.9	11.1	13.4
% Concessions w latrine	44.5	51.9	74.8
People per latrine	51	38	30
% Increase in number of latrines from baseline	Baseline	117%	168%

* Both % households and % compounds with latrines are provided as typically extended families composed of multiple related households live within a single concession (compound) in rural Benin. The number of households living in a single compound varies greatly from just one to over 13, thus while in the case of smaller family compounds with several related households, one latrine per concession might count as 'access' it is unlikely to constitute 'adequate access' in the case of large occupancies. Household coverage under-represents latrine access while concession coverage over-represents it.

represent the total impact of the PHA programme. In the first instance they do not include those households that have started to construct a latrine but have not yet completed construction. This number may be higher than the number of completed latrines given the extended duration of time it can take a household to plan, organize and construct a latrine. In rural Benin, many households dig the latrine pit after one harvest, wait until more money is available after the next harvest before having the slab installed and may even wait until after another harvest to construct the superstructure – thus a household may take 3 years to complete latrine construction once started. In this way it is important to collect data measuring not just completed latrines but those under construction and changes in desire for a latrine. Such data is in fact collected by PHA staff (though not presented in impact evaluations) through the community mapping process described above. For example, in the District of Kpomasse in Atlantique, the promotion cycle started in 10 communities in March 2006 and another 10 in May 2006. Six hundred households were targeted across these communities and by January 2007:

- 54 households (9%) had constructed new (improved) latrines without hardware subsidy
- 100 households (17%) had started (though not completed) latrine construction (as indicated by dug pits and/or completed concrete slabs)
- 175 (29%) had registered their desire to construct a latrine and were either awaiting Hygiene Agent visits to help with citing of the latrine or saving the necessary funds



This suggests that the total percentage of households constructing latrines in these communities as a result of the PHA promotional cycle will likely reach a minimum of 26% (combining latrines completed and under construction percentages) and probably higher (as indicated by expressed demand), however those latrines not completed within the cycle duration are not currently measured in impact evaluations.

Two other considerations further indicate that the presented data under-represents the impact of the PHA programme. Firstly, the volunteer hygiene promoters' maps only cover the targeted PHA intervention community they work in, so data they collect does not cover latrines built outside of monitored programme communities. However, successfully trained local masons are constructing latrines both outside and within them. Some may even be building more latrines outside the PHA intervention communities than within them as illustrated by the community of Lo Kossa in Kpomasse. Here two masons were trained. Within Lo Kossa they had built 16 latrines between March 2006 and the end of 2007, however, they had also constructed a further 45 latrines outside this community. Thus, they had built three times as many latrines outside Lo Kossa as in it. If this pattern is being replicated elsewhere many more latrines are being built as a result of the PHA programme than are being captured in direct monitoring.

This phenomenon relates to Diffusion of Innovations Theory and specifically to what is known as the multiplier effect whereby initially only a few innovative and risk-taking people (known as 'early adopters') build latrines but over time,

seeing and trusting other people's toilets, more start to construct them (as the traditional healer described in Box 2 did). Over time, as more people build latrines in an area, installation becomes a less risky, more acceptable and desirable reality and a contagion sets in leading to the ownership of a toilet becoming a social norm. This means that as the percentage latrine coverage in an area goes up the ongoing rate of latrine installation should also increase resulting in an exponential growth rate (see Jenkins 2004). Thus while doubling and tripling of latrine numbers are impressive in themselves, further increases in sanitation coverage are likely to take place outside the PHA communities and to continue after the cessation of the intervention as those households already constructing latrines complete them and as increased rates of coverage push those without toilets to seek to install them through the development of a social norm.

Given the success of the programme to date, it is no surprise then that the DHAB now intend to scale-up their intervention further with a goal to reach 25,000 households across 64 District within 9 of Benin's 11 Departments, aiming for a 10 percentage point increase in latrine coverage within the PHA monitored areas, a target that should be met and indeed be exceeded through multiplier effects beyond the PHA programme's implementation cycle and directly monitored communities.

Future challenges: looking back and moving on

Rural marketing in Benin presents an effective sanitation promotion model from which other countries can gain many lessons and inspirations. These come

not only from the strengths of the Benin programme but from understanding some of the current weaknesses that need further development to achieve a more rapid uptake.

Supply

While the PHA programme has created a very strong package of local communications materials and model for promotion delivery (the hygiene promotion volunteer model), and has identified affordable and desirable latrine options and trained masons in their construction, there are still supply-side constraints which clearly block latrine construction for some households. In Benin, cement is expensive (about US\$8-10/bag and 2-4 bags are needed in latrine construction, depending on the model) and in rural areas is often inaccessible – where it is available there may be an additional US\$1 transport fee to get it to the home. This problem of expense and unavailability need to be addressed so that consumers and cement providers might be better linked (see Table 1) through new or improved supply chains to maximise the PHA impact in the future. Further, new affordable latrine designs are needed to address the challenges of difficult geologic conditions.

Targeting communities

The programme impact has also been variable across locations and a strategic approach to targeting communities in scale-up needs to be developed so that, in the interest of reaching the Millennium Development Goals, 'easy win' communities - those ripe for local opportunities to build where uptake is likely to be greatest and most rapid are identified and targeted ahead of those where the challenge is likely to

be greater. In particular, communities selected for intervention should not be in close proximity to areas with a recent history of latrine construction hardware subsidies. Past evaluations show clearly that where people know about hardware subsidies, willingness to pay for latrines is suppressed due to the expectation of waiting to receive a free, or highly reduced-cost one. This has been one of the major challenges experienced in some of the communities in Zou, responsible for its lower rate of latrine uptake compared to Atlantique, Alibori, and Collines, where no such problems have been encountered.

Despite room for further enhancements to increase programme impact, Benin's rural sanitation model still represents one of the most promising sanitation programmes currently under operation in Africa, and offers valuable lessons and inspiration for rural sanitation programmes across the continent and beyond.

Key lessons

The Benin story illustrates clearly that sanitation marketing can really work particularly in areas without a history of hardware subsidies. Central elements were key to Benin's success:

- Political Leadership and Drive
- In-Depth Formative Research to Understand Indigenous Motivations for and Existing Constraints to Latrine Acquisition
- Emphasis on non-health, image-based promotional materials
- Importance of house-to-house promotion
- Private Sector Development for Latrine Delivery and Promotion
- Zero Hardware Subsidies



Trained mason building casting slab on-site for new customer.



A newly-constructed slab.

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- ¹Further information on the development, implementation and impact of this first phase of PADEAR (1996-1999) in pilot communities in Atlantique and Zou/Collines Departments can be found in a previous WSP Field Note (Reiff & Clegbeza, 1999).



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