

The Spread of Sanitation

HKI's CHANGE Project took a novel route to improving health outcomes by integrating Community-led Total Sanitation into a nutrition-sensitive agriculture program

A local mason shows off the latrine he has built

"In two or three years, there will be a latrine in every household. And when a stranger arrives and needs to relieve himself, we won't have to be embarrassed to explain that he must go out into the bush. The shame will have disappeared." With this optimistic vision, Animata Naba of Comboari village in eastern Burkina Faso described the effects of the Community-led Total Sanitation (CLTS) process her village underwent as part of the CHANGE project, led by Helen Keller International (HKI) with funding from Global Affairs Canada.

CLTS, first developed by Kamal Kar in Bangladesh in 1999, is a methodology for mobilizing communities to eliminate open defecation—a key element in the disease-spreading cycle of fecal-oral contamination. Realizing that simply providing toilets does not guarantee their use and can create a culture of dependence on subsidies, CLTS focuses on the behavioral change needed to ensure sustainable

transformation. This is done through a series of awareness-raising activities to motivate a community to undertake collective change through mutual support and local solutions.

In the HKI approach, the process begins with a four-day 'triggering' event, which leverages the basic human sentiment of disgust to motivate desire to end open defecation. This series of intentionally shocking activities, such as a group visit to the community's defecation sites, often leaves a strong impression. In Lorgho village, for example, Moyenya Salamate laughed as she recounted the event: "we found the pile of poop, covered with flies, and everyone ran away in disgust! When we later saw the open cooking pots in someone's courtyard, also dotted with flies, the connection was clear... No one wanted to eat from them." The impact of this process became clear just a few weeks later: even as HKI trained local masons to build simple latrines consisting of a concrete

slab-covered pit, pits had already been dug in anticipation. Indeed, some people did not wait for the masons to be trained: Animata Naba built a latrine immediately after the triggering, with the help of friends in neighboring villages who had done it before.

In addition to this training, HKI helped create a local hygiene committee, including a group of volunteer hygienists who performed outreach within the village and followed up on latrine construction. Hygienists received a job kit with a book of images to use in aiding their discussions; these illustrated best and worst hygiene practices as well as the steps to constructing a latrine and were useful job aids in a zone where literacy is exceptionally low. Hygienists' visits to households went beyond latrines to discuss hand washing and water pump hygiene, which are other key moments for breaking the fecal-oral cycle of disease transmission. As Mariam Naba, a Comboari water committee member, noted laughingly: "Everyone goes to the pump, and who knows where their feet have been! So you could have your water contaminated before it even arrives at the house!" Indeed, after the Comboari water committee started regularly discussing water-point hygiene, Mariam noticed cleaner water points within the village—as well as the strong engagement of village chiefs leading the way by digging their own latrine pits.

Mariam's neighbor, Aminata, deeply appreciated the hygienists' work: "They come to the house and give us support, tell us things we didn't know." Aminata's neighbor Fatimata was also a hygienist and found the role immensely motivating: "When I walk around, I can see the village becoming cleaner—there are fewer piles of human waste around. As the one to share the information, I am happy to have helped make this change." Nearby villages

Partners Trained in Sanitation

Village-level hygienists: 60



(additional 30 planned)

HKI staff and partners: 30



(additional 30 planned)

Local Masons: 60



Impact on Latrine Access

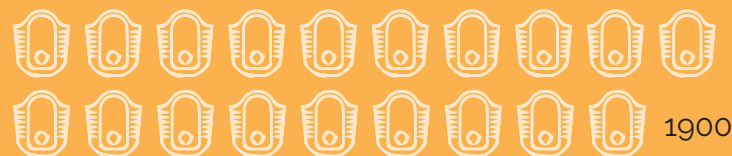
Participating household with latrines at project start



Latrines constructed during CHANGE project:



And by two years after its end:



of Kabghin, Combembogo, and Kouryonghin were soon also sprinkled with newly cast concrete latrine slabs. Indeed, monitoring data collected only a few months after the triggering event indicated that nearly one quarter of households had already begun to construct latrines.

While CLTS has been used in many countries, HKI's process, used not only in CHANGE, is unique in that the approach is integrated into a nutrition-sensitive agriculture approach, known as Enhanced Homestead Food Production (EHFP). This fusion may be surprising, but water, sanitation, and hygiene (WASH)

practices are essential to improving nutrition. Indeed, this approach was based directly on an International Food Policy Research Institute evaluation of an earlier HKI project in the same zone of Burkina Faso, which suggested integrating WASH into the program's design.

Infections increase nutritional needs while reducing nutrient uptake, and the long-known bacterial theory of disease is being newly bolstered by understanding of environmental enteropathy, in which constant fecal-oral contamination results in changes to the gut, significantly impacting absorptive and immunologic



A village meeting to discuss nutrition and sanitation concerns.



"For me, there aren't things that are difficult to change, there are just things that we don't know about yet. Like with latrines, we used to think they were just too expensive to build; now we know this is within our reach, and the men have already started digging. The rest will come in time."

- Village hygiene committee chairwoman.

functions. Many low-resource areas are prime territory for such interactions. Animals wander the courtyards where their owners eat and toddlers crawl, open defecation is common, and infrequent hand washing and limited oversight of young children put them at risk of ingesting human and animal waste. Indeed, the WHO estimates that 2 million annual diarrheal disease deaths are attributable to unsafe WASH practices. Yet in 2010, over a billion people worldwide were practicing open defecation, with 47% lacking access to on-site improved sanitation facilities according to UNICEF/WHO.

In Burkina, improved sanitation could have a massive impact: less than 1% of the rural population has improved sanitation facilities, and 70% lack basic latrines. Unclean drinking water and poor hand hygiene are also widespread. In an HKI study, children's caregivers were observed washing both hands with soap at only 1% of the

recommended 'key moments' (e.g., before eating or cooking), and in eight hours, only two out of 60 children had their hands washed with soap. It is hard to imagine that Burkina Faso's 31.5% prevalence of chronic childhood malnutrition is not partly caused by disease transmission through such pathways. While certain WASH solutions, such as ensuring universal access to safe potable water, ought to be government-led, many can be implemented by the local population with outside organizations' technical assistance through processes such as CLTS.

However, the integration of improved sanitation within a multisectoral nutrition-sensitive agriculture project is not without challenges. Additional partners entail added complexity, and a community may face limits in simultaneously assimilating multiple behavior-change messages and acting on them. Nevertheless, such an integrated

approach offers the opportunity to amplify already-demonstrated effects of agricultural interventions on health by fostering an environment with reduced disease transmission and less frequent childhood infections.

Throughout the CHANGE project, the dry winter months of the construction season in Burkina Faso rang with the sounds of masons and village hygienists, trained by HKI, helping their communities take steps towards improving their collective health. Over the course of the project, almost 400 latrines were built, and another 1900 followed in the next year, through a subsequent project. This improved infrastructure contributed to significant improvements in childhood nutrition, as shown by an IFPRI impact evaluation of CHANGE. It also created a more welcoming environment for any visitor who happened to come knocking on Animata Naba's door.

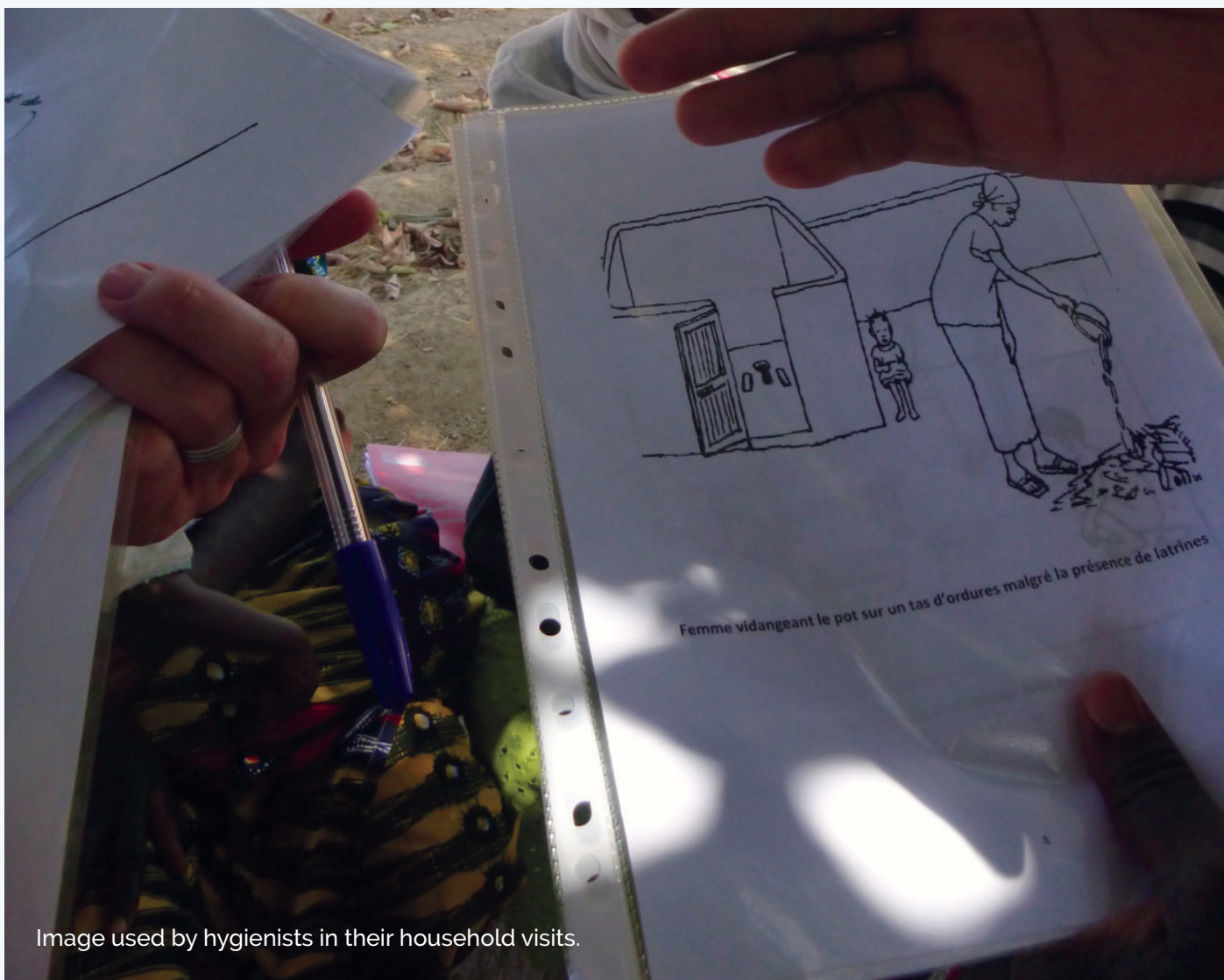


Image used by hygienists in their household visits.

What is Enhanced Homestead Food Production?

- A communal garden or 'village model farm' is established in each village, including infrastructure such as a well.
- On this garden, women learn improved gardening and animal husbandry practices.
- Interactive nutrition education improves their understanding of the causes of malnutrition, including low dietary diversity and poor sanitation, and potential solutions.
- Women are encouraged to establish their own gardens and apply improved infant and young child feeding and hygiene practices.
- Women's empowerment activities support more equitable intra-household decision-making and workload and resource sharing.
- With more varied agricultural products, potentially greater earnings from selling surplus production, and new knowledge, participants are better able to feed their children and families diverse diets rich in micronutrients, combatting malnutrition and improving child health and growth.

FIGHTING MALNUTRITION AT ITS ROOTS.

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