

# Water and Sanitation

## Digging Deeper



CWS-CAMBODIA



At the rate rural communities are gaining access to sanitation, it will take Cambodia 150 years to achieve its goal of universal coverage, according to a report last year by the World Bank-sponsored Water and Sanitation Programme. Only 16 percent of rural Cambodians have access to toilets, the report estimated. In some areas, such as Svay Rieng province, the figure is 2 percent.

The Ministry of Rural Development does not have an investment budget for Rural Water Supply and Sanitation and is entirely dependent on external aid. The

annual budget for the ministry is about US\$8 million per year, the report noted.

Without water there can be no sanitation. During Cambodia's long dry season (and extended droughts in some districts) access to water remains a daily challenge. In many villages, residents rely on hand-dug wells (above), which every year must be deepened a meter or 2 to find water, which is contaminated with bacteria, parasites and worms. Although this water is unsafe for consumption, it is sometimes the only option. Other sources, such as streams and

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ponds, often run dry weeks after the annual rains stop.

CWS-Cambodia's Water and Sanitation (WatSan) project in Svay Rieng province has assisted 19 villages in 2 districts. The model, which fuses education with delivery of wells, latrines and bio-sand filters, has been implemented in conjunction with the Provincial Department of Rural Development over the past 3 years. Despite its success, only 15 percent of residents of the villages have been provided with filters, latrines or wells. The project had been due to phase out of these districts in June of this year and then duplicated in 3 other remote districts of the province.

Residents of villages in the 2 districts where the project is operating now, as well as their commune councilors, expressed alarm about CWS phasing out. They need more filters, wells and latrines. In drought-prone villages like Chea Theach and Muni Proesksa, for example, there are only 8 and 9 hand-pump wells, respectively.

"We need more help," explained Chea Theach village chief Lon Sarat. Many residents of his village, which

spreads out along and behind a dirt road near the Vietnamese border, spend hours a day walking to ponds to fill plastic buckets with bacteria-contaminated water. Because firewood (the primary source of fuel in this village) is scarce, they often do not boil the water before drinking it. When they get sick it is an 8 kilometer trip to the nearest health centre.

CWS-Cambodia focuses on helping the absolute poor. In villages where almost every household is poor more funding is required to ensure that all residents have access to safe water. Our WatSan model is very effective to those it reaches, but residents of the villages where we work find its limitations disheartening and difficult to accept.

CWS-Cambodia is seeking funding continue its work in these districts while expanding to 3 more. Instead of phasing out, CWS is planning to distribute more filters and latrines, as well as upgrade wells built in the 1990s that are no longer functional.

The WatSan model is being adapted to expand the number of bio-sand filters distributed and include more comprehensive coverage.





*A mother and her children in Svay village, Preah Vihear, at an open well that cannot be used. It was so poorly constructed that mud and soil seep in from the cracks and contaminate the water.*

## Well Done: safe water

Thirteen-year-old Wan Kin (right) and 8-year-old Mao Tun are overjoyed by the hand-pump well CWS installed in Svay village (Preah Vihear province). They no longer have to spend 2-3 hours each day carrying buckets of water from Smoke River, which is about 300 meters from their village, during the dry season.

Besides the long distance, the banks of the river are slippery and steep. Those whose task is collecting water from the river – mainly women and children – often suffer from sprained ankles and knees after slipping on the steep, muddy banks, as well as constant shoulder and back aches from the weight of the water-filled buckets. They have to make several trips a day during the dry season to supply water for one household.

The well was installed in May 2008 at a cost of \$379 and is shared by 20 households. Residents of the village built the cement platform, and a local private company drilled the well and installed the handpump. The company also trained residents on how to repair the pump.



This training came in handy on December 30, 2008 when the hand pump broke at about 1pm. By 3pm it had been repaired by village development committee leader Toy Dom (right). The replacement part was bought in a market in the nearby town of Chaom Khsant for 1,500 riel (about 30 US cents).

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Other wells installed in the village are not so easy to repair. One, which cost over \$1,500 to install, has been unusable for 6 months, residents say. They do not know how to repair that hand pump. An open well at the village's primary school, paid for by a well-intentioned family from Oregon, was constructed so poorly that mud leaks from the cracks into the water, making it undrinkable even for cattle.

There are 6 wells in the village, 2 of which are unusable. The three wells CWS installed last year, 2 hand-pump wells and one open well, are functional and easy to maintain. In 2009, we plan to install 2 more open wells in the village. Due to budget constraints, only

8 more hand-pump wells can be installed in the 18 villages in the target area.

Besides the benefits mentioned above, residents also receive training on the link between safe water and health as well as home gardening. Bio-sand filters have also been distributed to 83 households in the villages and 178 more will be distributed during the next fiscal year.

