

APPENDIX 6

Story: The Biosand Filter Disaster after the Hurricane Mitch Disaster

Hurricane Mitch of 1998 struck Central America and caused US\$560 M in damage to the water/sanitation infrastructure, affecting 800,000 people. U.S. AID distributed 30,000 biosand filter kits, which were comprised of unassembled small parts – PVC pipes, elbows, etc.)

Funds provided for the hardware did not extend to include software – training for the project managers, educational materials for the users, monitoring of the performance. Small parts that were misplaced or broken were unavailable in remote villages and had to be brought in from the capital, Managua. Managers often did not know how to assess the effectiveness of the filters and recommend solutions if there were problems. End users did not realize that when the flow rate slowed to a trickle, that this was not an indication that the filter was broken, but that it was time to clean the filter – a situation easy to fix.

Doña Daysi of Jinotega, proudly displays the filter in her kitchen and remembers how puzzling the whole system seemed from the start. “At the beginning, we did not know how to use it...After a while, we received some training and we were able to copy from each other.”

At the time, 1998, this deployment was one of the largest of any HWTS product anywhere in the world. A follow-up independent review several years later of project managers and beneficiary households revealed several problems such as lack of spare parts, poorly trained project managers and end users, lack of monitoring of both hardware and software aspects of the program.

Often deployments work at the onset while some agency stakeholder tightly manages the program. However, because long-term sustainability is not considered, there is no transition plan when the original administering agency relinquishes control and the local agencies assume on-going program responsibility. As soon as there is no direct control, the programs start to slow down and then stop functioning completely. The lack of a supply chain for spare part, the lack of local agency and community involvement at the outset are factors leading to failure. (Adapted from Lukacs, H., 2003)