World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:10, No:05, 2016

Training During Emergency Response to Build Resiliency in Water, Sanitation, and Hygiene

Authors: Lee Boudreau, Ash Kumar Khaitu, Laura A. S. MacDonald

Abstract: In April 2015, a magnitude 7.8 earthquake struck Nepal, killing, injuring, and displacing thousands of people. The earthquake also damaged water and sanitation service networks, leading to a high risk of diarrheal disease and the associated negative health impacts. In response to the disaster, the Environment and Public Health Organization (ENPHO), a Kathmandubased non-governmental organization, worked with the Centre for Affordable Water and Sanitation Technology (CAWST), a Canadian education, training and consulting organization, to develop two training programs to educate volunteers on water, sanitation, and hygiene (WASH) needs. The first training program was intended for acute response, with the second focusing on longer term recovery. A key focus was to equip the volunteers with the knowledge and skills to formulate useful WASH advice in the unanticipated circumstances they would encounter when working in affected areas. Within the first two weeks of the disaster, a two-day acute response training was developed, which focused on enabling volunteers to educate those affected by the disaster about local WASH issues, their link to health, and their increased importance immediately following emergency situations. Between March and October 2015, a total of 19 training events took place, with over 470 volunteers trained. The trained volunteers distributed hygiene kits and liquid chlorine for household water treatment. They also facilitated health messaging and WASH awareness activities in affected communities. A three-day recovery phase training was also developed and has been delivered to volunteers in Nepal since October 2015. This training focused on WASH issues during the recovery and reconstruction phases. The interventions and recommendations in the recovery phase training focus on long-term WASH solutions, and so form a link between emergency relief strategies and long-term development goals. ENPHO has trained 226 volunteers during the recovery phase, with training ongoing as of April 2016. In the aftermath of the earthquake, ENPHO found that its existing pool of volunteers were more than willing to help those in their communities who were more in need. By training these and new volunteers, ENPHO was able to reach many more communities in the immediate aftermath of the disaster; together they reached 11 of the 14 earthquake-affected districts. The collaboration between ENPHO and CAWST in developing the training materials was a highly collaborative and iterative process, which enabled the training materials to be developed within a short response time. By training volunteers on basic WASH topics during both the immediate response and the recovery phase, ENPHO and CAWST have been able to link immediate emergency relief to long-term developmental goals. While the recovery phase training continues in Nepal, CAWST is planning to decontextualize the training used in both phases so that it can be applied to other emergency situations in the future. The training materials will become part of the open content materials available on CAWST's WASH Resources website.

Keywords: water and sanitation, emergency response, education and training, building resilience

Conference Title: ICWSFSWM 2016: International Conference on Water, Sanitation, Food Security and Waste Management

Conference Location : Montreal, Canada **Conference Dates :** May 16-17, 2016