Providing Safe Drinking Water in Post-Civil War Sri Lanka

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Fondation Suisse de Démimage
Happy children enjoy a safe playground once again. A new school was built in Mannar, Sri Lanka, for the first time in four years in 2012.

After decades of Civil War, Sri Lanka is making positive strides toward recovery. As former refugees return home, it remains to be seen whether the poorest districts will have access to one of the most basic human necessities, clean water. Foundation Suisse de Déminage (Swiss Foundation for Mine Action) hopes to alleviate this situation by clearing contaminated wells.

“...While we started clearance operations in the Mullaitivu district in April 2010, we found that all the wells had not been used for more than two years. The water was dirty and polluted, and we suspected explosive remnants of war, small arms and other dangerous items would be in the wells. During the survey it was confirmed that these wells are highly contaminated with explosive remnants of war and other devices. We immediately started our job [clearance].”

– Noel Peacock, FSD Technical Advisor

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The Sri Lankan Civil War (1983–2009) threw the country into turmoil for nearly three decades, claimed as many as 100,000 lives and resulted in thousands of “silent killers” scattered over northern and eastern Sri Lanka. The conflict left behind large numbers of various types of explosive remnants of war, including mortar bombs, artillery rounds, small arms ammunitions and landmines in unexpected locations such as water wells. Landmines and ERW continue to have significant negative impacts on individuals, communities, agriculture and the wider economy in Sri Lanka’s poorest districts: Mannar, Vavuniya and Mullaitivu. Even after resettlement, subsequent observations from the Ministry of Economic Development conclude that many people in these areas live adjacent to mine/ERW-contaminated land.

Contaminated Wells

After the Sri Lankan government released land for resettlement, Fondation Suisse de Déminage (Swiss Foundation for Mine Action) became aware that returnees to Mannar, Vavuniya and Mullaitivu districts faced the additional problem of mine and unexploded ordnance contamination in wells. Internally displaced persons expressed lack of adequate safe water as the primary concern prior to resettlement. During the war, open wells were a convenient location to quickly dispose of unwanted ERW. As civilians returned to recover their houses and properties, they often found discarded ERW at the bottom of open wells. ERW in and around open wells greatly affected the health prospects of returnees, the ability of communities to resume agricultural production and the maintenance of livestock welfare.

In December 2010, the Swiss Foundation for Mine Action (Fondation Suisse de Déminage) set up an initial water well project in the Mullaitivu district. The following year, the project expanded to include a full-scale well clearance operation in the same district.

**Fondation Suisse de Déminage (Swiss Foundation for Mine Action)**

**Mines Advisory Group (MAG)**

**Sean Sutton** is an award-winning photographer, whose well-known pictures show the impact of landmines and ERW on communities and have been published and exhibited all over the world. His book documenting how landmines and ERW affect people in Laos was run-up for the Leica European Publishers' Award. Sutton is MAG’s marketing and communications manager and has worked for the charity since 1997.

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submersible electric water pumps, generators, overhead gantry tripods, hose pipes and aluminum foldable ladders. Upon arrival in a village, the teams prioritize tasks based on a risk assessment. In broad terms, any confirmed hazardous area within the task location is a priority, with subsequent well clearance based on the priorities of local communities. Prior to well clearance, the teams clear a 25 m (82 ft) radius around a well to ensure team safety during the operation. Once the surrounding area is secure, the team pumps the well dry using the submersible pump to expose the bottom of the well.

Following the pumping process, one team member wears protective equipment to guard against biohazards, snake bites and debris, and is lowered into the well on a harness suspended from the overhead gantry. The deminer then searches the well bottom to a minimum depth of 15 cm (6 in). Any ERW in the well is placed into a basket and hoisted to the surface. At the well site, the explosive ordnance disposal team assesses the conditions of the items. If the team considers recovered items too dangerous to move, they are destroyed in situ. Items safe to move are taken to a central demolition site for later destruction. The EOD team is qualified to deal with all ERW discarding them as hazardous.

Safety Messages

In addition to clearance activities, a need emerged to educate local communities and NGOs, international NGOs and water sanitation workers in landmine and minefield safety. FSD community liaison teams provide returning IDPs with mine awareness training by educating participants on warning signs, identifying landmines and items of UXO, safe behaviors when encountering suspicious objects, and contact details of national mine action offices and demining agencies.

The time taken to clear a well depends on a number of factors, namely, the well size and the amount of contamination including mud, general refuse, leaf litter and any items of ERW. Once clearance is confirmed, the well is marked with “FSD CLEARED” in blue spray paint.

As part of the follow-up process after clearance, a completion report is filed with regional mine action office, recording any items of ERW found. In addition, the national water board is informed of clearance completion. The national water board is then responsible for follow-up water purification of the well.

Achievements

Since the project’s commencement, FSD has cleared 2,214 wells, removing and destroying more than 42 AP mines, 556 items of UXO and nearly 57,468 ERW in FSD areas of responsibility in Vavuniya, Mannar and Mullaitivu districts. More than 47,000 IDPs have benefited from FSD’s well clearance initiative. As the demand for clean water resources increases, some international nongovernmental organizations including Global Water and Hygiene and Sanitation for All (SWA), an international partnership providing sustainable, universal access to clean water, selected “FSD CLEARED” wells as a priority for water purification to improve the quality and quantity of water provision at the community level. Well clearance ensures that multiple families have sufficient safe water for personal and domestic use.

The deminer searches for hazardous objects in the well.

Thao Pham holds a Master of Business Administration in economic engineering from the Ground Forces Officers School. Thoms joined FSD in 2006 and works as a Programme Manager in Sri Lanka. He has more than 14 years of field experience in mine action, including in Afghanistan, Angola, Croatia, Mozambique, Tajikistan, Uganda and Yemen. He previously worked with the United Nations Office of Project Services, United Nations Development Programme and a commercial company.

Beneficiaries using “FSD CLEARED” wells.

The well clearance project is strengthened by the generous support of the Swiss Development Cooperation, the Australian Agency for International Development and the Office of Weapons Removal and Abatement in the U.S. Department of State’s Bureau of Political-Military Affairs (PM/WRA).

Humanitarian demining extends beyond ground clearance with a metal detector to eliminating the threats landmines and ERW pose to human lives wherever possible. Well clearance is an effective mine action intervention for FSD. Additionally, well clearance is closely linked with national development priorities, helping communities to overcome obstructions to social and economic development.

According to Martin Field, the communications officer at SAS, the cards are of interest to workers involved in weapons manufacturing, removal, tracing, record-keeping, policy making and law enforcement.

All three sets of cards are available free of charge. Please contact sas@smallarmssurvey.org for more information.

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