

Providing Safe Drinking Water in Post-Civil War Sri Lanka

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. *Fondation Suisse de Déminage* (Swiss Foundation for Mine Action) hopes to alleviate this situation by clearing contaminated wells.

by Hartmut Thoms [*Fondation Suisse de Déminage*]

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.¹ 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.²

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.³

During the war, open wells were a convenient location to quickly dispose of unwanted ERW. As civilians returned to

reoccupy 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,

“When 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

the ability of communities to resume agricultural production and the maintenance of livestock welfare.

To address the need for safe access to water in post-conflict communities, FSD set up its first well clearance team in 2009. Since then, in response to the increase in returning refugees, FSD’s well clearance project expanded to four well clearance teams. Each local well clearance team consists of a team leader and three deminers who are trained and equipped to carry out well clearance. Clearance tasking and prioritizing is carried out in close coordination with local water sanitation teams, the provincial authorities and the regional mine action office. The well clearance activities are conducted parallel to ongoing mine

clearance and survey operations. As a result of this close cooperation with partners and stakeholders, the well clearance teams achieved good success. For instance, in 2010 FSD reported clearing 1,084 wells in addition to removing 19 anti-personnel mines, 186 UXO and 33,688 ERW.²

Well Clearance

A tractor transports the teams and their equipment between tasks. Each FSD mobile team is equipped with all the necessary equipment to carry out well clearance, including



The deminer searches for hazardous objects in the well.
All photos courtesy of FSD.

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 surface, 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 discovered by well clearance teams.

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, record-

ing 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.



Deminers climbing up the well.

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 munitions 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. So far, FSD has reached 55,000 people. In addition to risk education and the distribution of mine risk awareness materials to communities prior to and during clearance, community liaison teams also distribute mine risk awareness material to



Beneficiaries using “FSD CLEARED” wells.

the National Water and Drainage Board staff. In turn, these agencies provide this material to all other organizations clearing wells in their districts.

The well clearance project is strengthened by the generous support of the Swiss Development Cooperation, the Australian Agency for International

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.⁴

See endnotes page 67

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



Hartmut Thoms holds a Master of Business Administration in economic engineering from the Ground Forces Officers School. Thoms joined FSD in 2008 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.

Hartmut Thoms
Programme Manager
Fondation Suisse de Déminage
36, rue du 31-Décembre
CH-1207 Geneva / Switzerland
Tel: +94 777 679 808
Fax: +41 22 737 20 49
Skype: hartmut.march1
Email: hartmut.thoms@staff.fsd.ch

News Brief

Small Arms Survey Creates Playing Cards

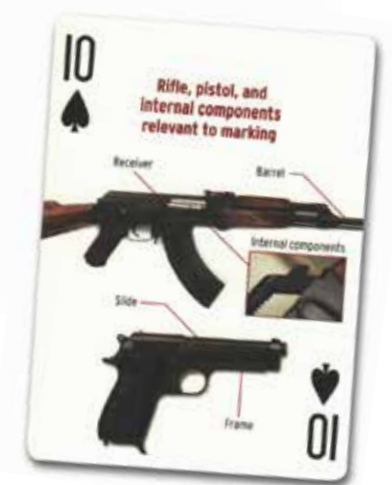
In August 2012, Small Arms Survey, in partnership with the Office of Weapons Removal and Abatement in the U.S. Department of State’s Bureau of Political-Military Affairs (PM/WRA), released a third set of small arms informational playing cards, the *Marking, Record Keeping and Tracing Implementation Support Cards*. The previously released cards focused on small arms identification (available in English and Spanish) and physical security and stockpile management (available in English and Serbian).

The new cards are designed to provide general knowledge of the International Tracing Instrument. One of the playing cards describes ITI as “designed to facilitate the successful tracing of small arms and light weapons (SA/LW) used in crime and armed conflict.” Other cards have information regarding marking identification, record-keeping and implementation of ITI in different countries.

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.

~ Kathleen Sensabaugh, CISR staff



The *Marking, Record Keeping and Tracing Implementation Support Cards* are designed and distributed to provide knowledge of the International Tracing Instrument.

Photo courtesy of Small Arms Survey/CISR.