Background

The earthquake that triggered what is now known as the Asian Tsunami was the most powerful the world has seen in the past few decades. It was however the tsunami that brought untold loss of lives and damages to 11 littoral Indian Ocean countries. In its wake has been a reported death toll of 217,000. The worst hit country, Indonesia suffered some 127,000 dead and 37,000 still listed as missing. Many more were injured.

The Singapore government and Singaporeans at large mounted our largest ever rescue and relief efforts to provide immediate relief to and assist in the subsequent recovery of the affected areas. The extraordinary scale of destructions, our proximity to and familiarity with the affected areas, and the fact that Singaporeans were amongst the victims were the main driving forces behind this effort.

Overview

Singapore’s relief efforts were focused in 4 countries: Indonesia, Thailand, Sri Lanka and Maldives because they are our close neighbours who were among the worst affected. In Indonesia, where the medical and transport infrastructure were badly damaged, we did the most. The Singapore Armed Forces mounted its largest operational deployment in its short history. The medical relief operation, codenamed...
Operation Flying Eagle (OFE), was activated on 27 Dec 2004 and lasted until 24 Jan 05. The operation escalated in size and magnitude over the period of deployment. At its peak, there were 1200 servicemen deployed in Aceh, operating 3 helicopter landing ships, 6 Chinook heavy-lift and 2 medium-lift Super Pumas helicopters, and 2 field hospitals in Banda Aceh and Meulaboh. About 10% of the forces were directly involved in providing medical relief, offer services as diverse as primary care, surgery, laboratory diagnostic services, public health and psychological counseling. In all, the Air Force hauled almost 300 tonnes of supplies and 2300 displaced persons. The medical teams attended to over 5000 patients and performed 63 surgeries. Voluntary welfare organizations also did their part and worked either with our Armed Forces or with their local partners to provide medical care in make-shift clinics and restored hospitals. Some of them are still working in Aceh today in the long road to recovery.

In Thailand, at the request of the Thai government, we provided assistance in 2 areas: search for survivors and identification of disaster victims. A Disaster Assistance and Rescue Team of the Singapore Civil Defence Force were deployed to Phuket and surrounding area to search for survivors and recover dead bodies. We also deployed a full DVI (Disaster Victim Identification) team, comprising fingerprint experts from the Criminal Investigation Department, forensic pathologists and dentists, DNA scientists, investigators and administrative staff from the Centre of Forensic Medicine. The team worked together with teams from 25 countries in the laborious, painstaking process of identifying over 5,000 bodies and to build a database of the victims for further investigations and identity matching.
In Sri Lanka, Voluntary Welfare Organisations took the lead. Three ad-hoc medical teams were deployed to the affected areas to provide primary care. The assistance to Maldives centred on public health. Reacting to the request of the government, we provided clean water through airlift and a treatment plant that could provide for 3000 people.

It was a major relief effort by any yardstick, considering Singapore’s size. Importantly, we believe that our efforts have made a difference to the disaster victims, especially in Indonesia. The Singapore Armed Forces were among the first foreign forces to be deployed there. More than the medical relief, the logistical support rendered by the transport aircraft and landing ship meant that we were able to reach victims in the areas where roads were badly damaged.

**Meulaboh**

Meulaboh is a fishing town located in the Western coast of the island of Sumatra, just 100 kilometers (60 miles) from the epicentre of the earthquake. It therefore received the full impact of the tsunami. It was believed that up to a quarter of the population perished in the wake of the tsunami. Amongst these were many of the healthcare workers who worked at the main hospital there. Meulaboh was in critical need for help.

**Going in Cold**

The Singapore Armed Forces have participated in many medical relief operations in the past. In addition to a primary care medical team, up to two officers are also put on standby under the United Nations Disaster Assessment and
Coordination (UNDAC) system. The officers could be activated at short notice to a disaster area to provide needs assessment for the UN. They would also come in handy to provide early information in support of any deployment of the SAF medical mission. Typically, a relief mission would involve a basic load of medical supplies and a primary care team that could be deployed very rapidly via fixed wing military transport aircraft. This model has proven to be versatile to answering to needs that arose from a range of natural disasters, including typhoons and earthquakes. Working either with the local civil or military authorities, such medical teams could provide the immediate relief to disaster victims while the national government and international community assembled further assistance. The same model was adopted for the relief mission to Banda Aceh.

However, given the appreciation that the western coast of Aceh would be cut off from land transport, the SAF despatched a Landing Ship Tank (LST) to bring relief to the isolated communities in western Aceh on 31 Dec 2004. The LST is a versatile, multi-purpose platform with great range and load capability. It carries helicopters, troops, equipment and has its own landing craft. Therefore it could be self-sufficient in terms of transportation, sea, air and land. On board the LST were a full complement of medical personnel, field engineers, divers, helicopter detachment and support personnel.

The first task force sailed not with a clear needs assessment done. Rather it was with an anticipation of the needs of a population totally devastated by the disaster. Hence, in addition to a primary health team, there were also a field surgical team and a public health component. Standard medical supplies sufficient for the
initial operations for up to 2 weeks were carried on board the ship. The focus was on the speed of response, rather than trying to getting everything right on the onset. Improvisation was to be the order of the day.

Detailed needs assessment was carried out only when the taskforce anchored off Meulaboh. Public-health trained doctors and medical officers who were trained under the UNDA system were first to land in Meulaboh to assess the needs of the population. Working with the Indonesian Armed Forces, the SAF mission was able to provide primary care to displaced person camps as well as to help bring the Meulaboh general hospital, into working conditions. Additional supplies and resources such as a mental health team were brought into Meulaboh in subsequent re-supply runs via both LST and helicopters flying in from Medan. As the ship was a floating warehouse, we encountered less log-jam compared to the situation in Banda Aceh, where the small airport was not able to handle the supplies coming in from outside.

**Coordination of Medical Relief Efforts**

Coordination occurred at many levels, and involved many different ministries. At the National Level, we activated the Homefront Crisis Management System in order to coordinate the work of the various ministries in looking after Singaporeans who were directly affected, as well as the relief efforts. The Ministry of Foreign Affairs worked with the affected governments for their needs assessment and diplomatic clearance. They also served as the initial point of contact with the international organizations. Within the health sector, there was an outpour of volunteerism among the healthcare workers. The Ministry of Health therefore helped
to link up the volunteers with the many missions mounted by the government as well as by the voluntary welfare organizations. The Singapore Red Cross Society was designated as the coordinator for all relief missions by voluntary welfare organizations in Singapore. The government assisted in providing essential information such as needs assessment that came out from the disaster areas. However, it was the coordination in theatre that was most crucial to make sure the assistance met the needs of the local.

Our good understanding of the Indonesian culture and language was a key advantage. Moreover, the Singapore Armed Forces have a very good institutional relationship with the Indonesian Armed Forces. The deployed forces were able to work effectively with the local commanders and served as interlocutors between the Indonesian authorities, the international organisations and the NGOs. In the three weeks that we were in Meulaboh, our people assisted in the daily coordination meetings to help the Indonesians direct the efforts of up to 30 agencies and organisations. No less important is the role the SAF played in coordinating and prioritising the delivery of critical medical supplies to Meulaboh and Banda Aceh, given that transportation was in short supply.

Capacity

It would be difficult for non-military organisation to be able to mount such a major humanitarian relief operation within such short notice. The operational readiness and preparedness of the military, the inherent command and planning structure make it well-suited to react swiftly. However, as Singapore has a conscript army with a large reserve force, most of its medical capability and capacity is with
the civilian sector. There are no **standing** medical teams to react to disaster relief operations; they are formed on an ad hoc basis, and on many occasions would require mobilisation of healthcare workers from the civilian sector. However, this system has proven to be flexible and effective for medical relief missions that are of relatively short-duration. We believe that NGOs and voluntary welfare organisations are better suited for longer term engagement.

**Conclusion**

The relief mission by the Singapore Armed Forces to Aceh was acknowledged by many to have made a positive contribution to the disaster victims’ well being. Being the first on the ground in Meulaboh, providing much needed **health services and logistical support** in the early phases, possessing local language capability and sensitivity to local customs were among the key success factors. Most importantly, however, was the professionalism of the servicemen and women, including many healthcare workers, who worked and improvised along the way in a very austere environment to deliver the best care possible to the tsunami victims.