

HUMANITARIAN RELIEF CHALLENGES IN THE WAKE OF THE SOUTH EAST ASIAN TSUNAMI DISASTER

Marcia Perry

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Abstract

The purpose of the paper is to outline and discuss key logistical challenges faced by humanitarian agencies in the immediate provision of relief to the victims of the December 26, 2004 tsunami disaster in Banda Aceh, Indonesia and Sri Lanka. The research method entailed interviews in Australia with senior managers in five organisations providing post-tsunami humanitarian aid in the regions and the analysis of secondary data. The interview findings indicated numerous logistical challenges faced by the aid organisations such as infrastructure devastation and bottlenecks of goods in warehouses. Compounding factors included the lack of logistics experts on the ground and the lack of information sharing and coordination amongst aid providers and with the local people. This paper presents an overview of important findings from the primary and secondary research, mainly emphasising interviewee responses concerning logistics-related challenges as well as an overview of secondary data findings.

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INTRODUCTION

On the 26th December, 2004, the news-breaking powerful Southeast Asian tsunami struck twelve countries including Indonesia, Sri Lanka, India, Somalia and the Maldives, resulting in approximately 220,000 deaths and thousands of injuries (United Nations (UN) Status Report, 2005). In each of the three worst hit countries of Indonesia, Sri Lanka and India, the poorest people suffered most (Oxfam Report, 2005). Moreover, much of the infrastructure of the affected countries had been destroyed resulting in the inaccessibility of many areas. The Indonesia province of Aceh was one of the hardest regions hit by the tsunami with 61,065 deaths, according to the Banda Aceh government website (2006). Many agencies responded to the disaster, including UN relief agencies, international and national governments, invited military groups, non-governmental organisations (NGOs) and private companies. Within several weeks of the disaster approximately 400 international NGOs were working in Indonesia alone, providing basic assistance to the affected population (Völz, 2005). Relief activity included saving lives, medical attention, body identification, clearing away rubble and debris, providing transport access, and providing basic survival requirements such as clean water, water purification kits, cooking utensils and food, safe areas, relocation, shelter and general living and psychological support. The relief effort was generally successful in stemming ongoing widespread deaths due to hunger and disease as can occur in the aftermath of a natural disaster (International Federation of Red Cross (IFRC), 2005). However, as was widely publicized in the media in late 2004 and early 2005, the relief effort was particularly hindered in the early post tsunami days. This paper draws attention to key logistical and operational challenges faced by agencies in providing effective and timely relief to the tsunami victims in the crucial days after the tsunami struck, focusing mainly on Indonesia and Sri Lanka.

LITERATURE OVERVIEW

The research project has clearly identified major obstacles to effective tsunami aid agency operations in the initial relief phase. Due to these obstacles the relief operations became ineffective, resulting in delayed relief for many who were injured, shocked, grieving and/or displaced.

During natural disasters agencies face many logistical challenges, including the destruction of physical infrastructure such as roads, bridges and airports, the remoteness of the area and limited transport capacity (Thomas and Kocpczak, 2005). It is vital for the participating agencies to possess the knowledge of what supplies are required, where they are located and what sort of transport is feasible (Long & Wood, 1995). Not only do the agencies require such knowledge, but an effective and speedy response requires the ability of logisticians to procure supplies and transport them to the field level (Thomas 2005). Although logisticians play an important role during the emergency phase, they are often given limited authority to execute decisions made by the emergency planners (Thomas, 2003). Effective coordination between natural disaster response parties including the local population, local government authorities and humanitarian organisations is an essential part of natural disaster management (Olorontuba, 2005; McEntire, 2002). Simatupang, Wright and Sridharan (2002) indicated that coordination amongst independent organisations is essential to improve their processes in response to the rapidly changing conditions. However, effective coordination in humanitarian emergencies is difficult to achieve. The involvement of a vast number of agencies can create obstacles in the coordination efforts at the field level (PAHO report, 2001). The participating agencies will have their own operating methods and sometimes there is competition amongst them for the limited resources (Long & Wood, 1995).

Information plays a very crucial role in disaster management, because the speed with which the critical information is collected, analysed and distributed by participating agencies will facilitate an effective response and hence more lives can be saved (King, 2005). Maxwell and Watkins (2003) also indicated that the emergency preparedness and response phases are driven by information. During a crisis, the humanitarian agencies will require information relating to the disaster situation, the affected population and the availability of resources (Zhang, Zhou & Nunamaker, 2002). However, collecting information may be very difficult because of inaccessibility to the affected areas due to the destruction of infrastructure and in some cases the remoteness of disaster-affected areas (King, 2005). Usually a needs assessment is conducted by humanitarian agencies to guide their decisions in a given disaster situation (Darcy & Hoffman, 2003). While making the assessments the agencies should give priority to information coming from local personnel and should use local expertise as much as possible. The local knowledge of the area ensures that relief is conducted effectively (Long & Wood, 1995; Olorontuba, 2005). Accurate needs assessment activity also requires collaboration among different parties, sharing of data and communication of the results (Darcy & Hoffman, 2003). Houghton (2005) also suggested that joint assessments should be conducted so that there is consistency in supplying relief material. Usually, the international agencies have adequate training in emergency operations but sometimes they may not be familiar with the local conditions. Moreover cultural differences can exist between the international agencies and the local community. In such circumstances the agencies should focus on collaborating and strengthening local partnership (Widmer, 2003). This was reiterated in the World Disasters Report (IFRC, 2002) that stated in relation to a disaster in Mozambique: "*The relief effort worked best when Mozambicans led and fully participated in all aspects of disaster response.*" McEntire (1999) suggested that normally the local people are often from close-knit communities and their activities are based on set procedures and policies. When the local leaders are consulted and involved they will take personal interest in the success of relief operations (Long & Wood, 1995).

According to Jaspars & Shoham (1999), providing relief assistance to the worst affected areas requires an analysis of vulnerability. A vulnerability analysis involves identifying the population which is at risk and directing the development aid efforts accordingly (Cannon, 2002). The IFRC has developed a model called Vulnerability and Capacity Assessment (VCA) that assists NGOs to better understand the needs of people at risk and prepare accordingly (IFRC, 1999). Furthermore, Morrow (1999) emphasized that effective vulnerability analysis can be achieved through community planning at the local level. Refugees or internally displaced people (IDPs) have had to leave their homes, travel long distances and include women, children and old people (Long & Wood, 1995). Pregnant women, old and disabled people may not be able to easily get to the distribution centre (Houghton, 2005). Hence, ideally it is essential that distribution of food takes the vulnerable into account and is fairly and humanely allocated across the various localities where people have congregated.

Local sourcing is also very helpful in improving the relief efforts because the goods bought locally will be culturally appropriate (Long & Wood, 1995). Buying locally also helps in procuring goods quickly which is very essential during the emergencies. Moreover, local purchasing has the advantage of strengthening the local economy (Bennett, 2003). However, local sourcing also depends on the scale of the disaster. In case of a major natural disaster buying locally may not always be possible because sufficient stock may not be available in the local market (Economic Intelligence Unit (EIU) Report, 2005). Newport and Jawahar (2004) also pointed out that disaster preparedness will not be effective without the participation of the vulnerable communities. The communities should be prepared for future disasters and the community assets and response should be strengthened. A case study of 1999 cyclones in Orissa shows that by implementing community-based strategies disaster preparedness will be more effective (Thomalla and Schmuck, 2004). NGOs can play a very important role in preparing the communities for disasters. NGOs work directly with the poor and vulnerable groups of the society and hence they are in a position to incorporate the preparedness strategies in their work (Benson, Twigg & Myers, 2001).

RESEARCH METHODOLOGY

The aim of our research project was to address the problem of how emergency providers might address the issue of responding quickly and effectively in the time of incomplete information and disarray following a natural disaster. A major task was to identify the main challenges faced by a selection of major emergency aid providers who had become active in Southeast Asia in the early days following the tsunami. Furthermore, we aimed at identifying the main challenges faced by these players, and also other active organizations, in providing effective natural disaster relief. The research process entailed collecting and analysing both primary and secondary data. In-depth, semi-structured interviews were conducted with five senior managers of humanitarian relief organizations with operations located in Australia. The organizations comprised a government organisation, two international aid agencies and two international humanitarian logistics organisations. Names and particulars of these organizations and the interviewees remain anonymous for privacy reasons. The managers interviewed had been connected first hand with tsunami relief operations. A semi-structured questionnaire was developed to provide a consistent protocol for data analysis. The questions related to the following research themes:

- The steps leading to the decision to provide emergency relief.
- The elements of relief on which the organisation focused.
- The various difficulties faced in providing effective relief.
- Lessons learnt for the future natural disaster relief operations.

Initially interview data was collected and analysed through open coding and content analysis, identifying areas that related to the humanitarian aid approaches, the influence of efficiency, flexibility, responsiveness and cost in the coordination and the implementation of the local-international process of emergency relief in natural disasters. The findings were then re-examined in the light of a growing accumulation of secondary data. The secondary data included comprehensive field reports from major humanitarian organizations and governments.

KEY FINDINGS

The key research findings from the interviewed cohort, that are also well supported by secondary data and academic literature findings, included major logistical challenges, a lack of coordination amongst participating agencies, insufficient local involvement, a lack of important information availability and sharing, inadequate needs assessment activity and insufficient attention to the plight of vulnerable groups. One of the interviewees stated that *“logistics people were not included in our early planning and decision making process”*. This situation is apparently not uncommon. Thomas (2003) stated that logisticians are rarely included in the planning stages of a humanitarian response. However, most of the interviewees were of the view that logistics expertise should have been employed in the overall tsunami response planning. According to a survey conducted by the Fritz Institute (2005), there was a clear shortage of logistics experts during the disaster. A high proportion (88%) of the organisations had to relocate their experienced logisticians from the other projects such as Darfur, South Africa, to support the tsunami relief efforts.

The tsunami certainly brought in its wake a myriad of logistical challenges requiring urgent attention, particularly the destruction of transport and infrastructure such as roads, bridges, power and telecommunications. Many coastal areas were totally destroyed and in Indonesia the remoteness of some affected regions hampered the efforts of the relief agencies. The majority of the interviewees reported that airport congestion had been a major hurdle in their relief operations causing delays in distributing of relief. Moreover, according to one interviewee, *“in the early days there was just one forklift in Banda Aceh airport”* and in the words of another: *“there were insufficient warehouse facilities for the supplies coming in to Banda Aceh”*. The airports in both Colombo and Banda Aceh were clogged with relief supplies. Hoffman (2005) noted that the Aceh airport, being small in size, lacked the capacity to hold the high volume of planes arriving from different parts of the world. In the humanitarian context, distributing the correct volumes efficiently

and effectively where and when they are needed is very crucial (Arminas, 2005). This scenario certainly indicated a need for logistical expertise and leadership.

The effective application of information technology was another challenge for logistics operations. A relatively low number (26%) of organisation had access to software that could track their relief materials. The majority of the organisations had manual methods and spreadsheet packages for tracking goods which hindered the speed of delivery (Fritz Institute survey, 2005). The speed of response for humanitarian programs depends on the ability of logisticians to procure, transport and receive supplies at the field level (Thomas, 2003).

Lack of proper coordination among different parties was a major obstacle during the tsunami disaster. Furthermore, there were coordination problems between the international organisations and the local government. One of the interviewee stated that *"...coordinating logistical activity with the local governments and ministries in Sri Lanka was very difficult, causing delays in providing relief."* The presence of the large number of aid groups also hampered coordination efforts. The low level of coordination and collaboration amongst the participating agencies has frequently been a relief operation criticism (McEntire, 1999). Nevertheless, there were positive outcomes in the coordination efforts. United Nations' Office for Coordination of Humanitarian Affairs (OCHA) was able to take a leading role in overall coordination of the humanitarian relief efforts. OCHA developed Humanitarian Information Centres (HICs) in the affected areas where UN agencies, NGOs and other agencies could obtain necessary information such as maps of the affected areas and contact details of different NGOs working in those areas. Thus, coordination efforts were successful in some instances but the involvement of so many organisations made coordination difficult. Suparamaniam and Dekker (2003) indicated that disaster relief involves various countries and governments and this makes the location of authority for every particular problem unstable. In such circumstances the United Nations needs to take a lead role in coordinating the global response. Different parties involved in the disaster relief need to work in unison, which facilitates sharing of information and thus eliminates the duplication of efforts. Disaster management should be a shared responsibility and all the relevant parties should work through a temporary partnership agreement (Trim, 2004).

According to the IFRC World Disasters Report (2005), information plays a vital role in responding to disasters, and hence information is itself a form of aid. Maxwell and Watkins (2003) also emphasised the vital nature of information in the aftermath of a natural disasters with emergency preparedness and response activities being driven by information. Information availability was a major problem in the province of Aceh in the days following the tsunami and its associated devastation. The majority of the initial needs assessments were made by the international aid agencies. An important finding is the requirement of a system of coordinated assessment includes these agencies and relevant government bodies. Darcy & Hofmann (2003) further emphasised that agencies should see sharing the results of needs assessment studies as a mutual obligation.

When a disaster occurs the first group of people to respond are the local authorities, local NGOs and local staff of international NGOs. Since the immediate response is always local, the development of local relief infrastructure is very important (Thomas, 2005). Over-reliance by donors, foreign NGOs and UN agencies on international expertise should be avoided and the local expertise should be utilized to a great extent (Olorontuba, 2005). However, it is apparent that in the aftermath of this disaster many of the humanitarian aid agencies sent in their own assessment teams without including local people in their assessment teams. One of the interviewees pointed out that the *"...lack of trained staff at the field level was a major obstacle during the tsunami operations"*. Suparamaniam and Dekker (2003) stated that during disasters people who have knowledge are not given the authority to decide and people with authority do not have the necessary knowledge. The local communities should be used in both decision making and relief effort because they have the knowledge of local culture, language, traditions and political structures (Olorontuba, 2005). Moreover, working with community leaders and communicating with them will also help the agencies to gain the confidence and trust of affected people (Trim, 2004). Twigg (2001) also indicated that to understand the vulnerability of a society, political,

cultural and psychological factors should be taken into account. For the Sri Lankan communities affected by the tsunami, a variety of forms of pre-tsunami vulnerability existed. These were: socio-economic, evident in the high proportion of poor people; physical, in proximity to the sea and the flimsiness of seaside dwellings; environmental, in living in the ring-of-fire zone of unstable subterranean plates; political in that the poor were disadvantaged in their lack of power to change their circumstances; cultural in being very much tied to traditional solutions; and psychological through a lack of community disaster planning and procedures, made worse for some by internal military conflict.

An Oxfam report (2005) indicated that the tsunami mainly affected the poorest people in each of the three worst hit countries. In Sri Lanka nearly a third of the population in the affected areas was living under the poverty line. In addition, suffering was compounded for those affected by the Tamil conflict region. Hence, a high level of vulnerability existed affected people were due to various economic and political factors. The vulnerable groups in the society such as poor, very young, very old, women, disabled and people marginalised by race and caste suffer worst from disaster (Twigg, 2004). In the aftermath of the disaster, some of the most vulnerable groups were overlooked during the distribution of aid. According to Thomas (2003), the people who are visible at the time of distribution receive the aid but some of the vulnerable groups like widows, lower caste people who are not present may be ignored

CONCLUSION

The presented findings concerning the tsunami response phase challenges have clearly identified the lack of: general and logistical coordination, information sharing, adequate needs assessment activity, local involvement and attending to particular vulnerable groups. These findings are reiterated by other authors writing about variety of natural disasters. In the early response phase following a natural disaster, logisticians should be included in the planning and decision making process and the agencies should give importance to capacity building. Logistics coordination is imperative because often the participating agencies will have competing supply chains which cause duplication and wastage of resources. Overall coordination is particularly important because timely response can save lives. It is imperative that the participating agencies collaborate with each other and the local people, and share information and responsibilities. Information plays a vital role in disaster response because the agencies make their decisions based on the available information and usually the information collected will be inaccurate and incomplete. In such circumstances the participating agencies need to engage in networking and sharing of knowledge in order to provide effective relief. Local involvement is reiterated as an important factor to be considered in relief operations. Hence, broad, coordinated involvement of associated stakeholders and experts is clearly a disaster response requirement that calls for broad, coordinated disaster preparedness action by relevant international and local authorities.

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