A common technology system is essential not only for UN agencies and humanitarian organizations, but also for national authorities in disaster-prone countries, who often lack logistics software to manage incoming supplies in an emergency. The International Red Cross and Red Crescent Society recently adopted humanitarian logistics software to standardize the relief mobilization process.

Humanitarian logistics refers to the processes and systems involved in mobilizing people, resources and skills to help vulnerable people affected by natural disasters and complex emergencies. It encompasses activities including procurement, transport, tracking, customs clearance, local transport, warehousing and last-mile delivery.

Humanitarian supply logistics systems must be effectively coordinated to help people in disasters or emergency situations. This article looks at the way that information technology can assist.

Unfortunately, as the relief activities of numerous local agencies, governments and organizations increase, so does the complexity and potential for error in managing information and providing effectiveness in aid supply chain operations.

Transmitting Knowledge

Countries affected by the tsunami disaster are being flooded with tonnes of supplies, putting a great burden on already stretched relief staff who then must categorize and dispose of the material. This has now been seen with the heroic resourcefulness of people on the operations side in Phuket, Banda Aceh and other major relief centers dealing with a real lack of resources and tools.

The Thai Red Cross serves as an example of a national society well prepared with suitable IT now assisting the most vulnerable. Her Royal Highness Princess Maha Chakri Sirindhorn, an executive vice-president of the Thai Red Cross Society (personally affected by the tsunami, having lost her nephew in the gigantic waves), underlined the importance of technology to improve humanitarian supply chain preparedness.

We often say we live in a knowledge-based society, but we must remember that knowledge has to be transmitted into action to come to real use, especially when people’s lives are at stake.

Common System

The ability to share information on what relief items are arriving into a disaster zone will not only improve planning by agencies for the receipt and dispatch of these items at key entry points of airports and ports, but also help identify and address logistics bottlenecks, which commonly arise in emergency operations, said David Kaatrud, Chief of the World Food Program’s Logistics Service.

A common technology system is essential not only for UN agencies and humanitarian organizations, but also for national authorities in disaster-prone countries, who often lack logistics software to manage incoming supplies in an emergency.

The International Red Cross and Red Crescent Society recently adopted humanitarian logistics software to standardize and automate the relief mobilization process, allowing more control and visibility across its 178 member organizations. The Web-based technology allows up-to-the minute tracking of food, non-food, gifts-in-kind and financial information about the commodities in the supply chain.

Delays in sourcing emergency relief materials are now being reduced by eliminating paper trails of supply locations and creating a central repository for supply information. The final result is the ability to track donations through the entire mobilization supply chain up to the point of receipt of the materials at the disaster site. The humanitarian logistics software was fully funded by the world-renowned Fritz Institute.

The First Hours

Bernard Chomilier, head of logistics at the International Federation of Red Cross and Red Crescent Societies, puts the dilemma facing humanitarian logisticians in the first
hours of a disaster bluntly: "You don’t know what you need, where you need it or how to get it there, and it is a matter of life and death. What we are getting is the very latest in logistics technology, a Web-based system that will take our current processes and connect all steps of the logistics chain from the launch of an emergency appeal through procurement, to the final delivery and distribution of aid to disaster victims."

Aid agencies are also using geographic information system (GIS) software, utilizing computer-generated maps as an interface for integrating and accessing massive amounts of location-based information. GIS allows relief agency staff to get critical information about how humanitarian support efforts are progressing to ensure appropriate response agencies are acting in a coordinated and efficient manner. Once in the field, the coordination can continue as new data can be added and disseminated via wireless applications and Internet/Intranet connectivity.