







## **CASE STUDY**

The Power of Logistics: How Businesses Save Lives and Livelihoods in Disasters



## **ACKNOWLEDGEMENTS**

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### **Cover photo**

Airlink partners Project HOPE and MAP International support a medical delivery shipment for Sudan. Photo credit: Airlink.



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### **EXECUTIVE SUMMARY**

It is often only when things go wrong that stakeholders fully grasp the time and effort required to manage logistics, especially during emergencies.

Logistics encompasses everything from information-sharing and customs processes to warehousing and transportation by air, sea and road. Businesses in this sector leverage extensive networks of employees and partners to assess real-time conditions: is a road blocked, a port closed or an airport struggling with delays or capacity constraints? Based on the situation on the ground, companies such as Airlink Inc., DHL Group, and Kuehne+Nagel—the three organizations interviewed for this case study—solve problems on the go, supported by expert teams operating in the affected country or at headquarters.

In the humanitarian sector, supply chain logistics generally account for 60–80 percent of total costs.<sup>1</sup> This makes supply chain efficiency a top priority for private sector logistics partners, whose goal is to ensure that humanitarian goods are picked up, processed, transported and delivered as efficiently and cost-effectively as possible.

However, logistics is about more than just transportation. Aid comes in many forms, some of which must be deconsolidated and reconsolidated for transport, loaded onto trucks and connected to warehouses, requiring inventory management. Logistics also involves foresight: planning ahead, anticipating risks, securing procurement contracts and agreements and establishing partnerships to ensure rapid responses when requests come in.

Humanitarian organizations tend to specialize in search and rescue operations, aid delivery and coordination—areas that the United Nations (UN) and government agencies excel at. However, logistics is one area where the private sector does things best.

This case study seeks to demonstrate why humanitarian agencies and businesses need to work together in the field of logistics. It discusses the challenges of collaboration but argues that the potential gains constitute one of the strongest arguments for explicit cross-sector coordination throughout the disaster management cycle, from emergency preparedness to crisis response and recovery.

Lacourt, Matthieu, and Manon Radosta. "Strength in Numbers - towards a More Efficient Humanitarian Aid: Pooling Logistics Resources - World."
ReliefWeb, Réseau Logistique Humanitaire, 19 June 2019, reliefweb.int/report/world/strength-numbers-towards-more-efficient-humanitarian-aid-pooling-logistics-resources.



As part of the follow up to the response to Hurricane John, at the end of 2024, more than 141,000kg of maiz and 5,670kg of beans were distributed to 2,944 families across 25 communities in Mexico. This effort was spearheaded by CENACED, the CBi Member Network in the country. Photo credit: Unidos Por Flixs via CENACED

Effective collaboration between the private sector and humanitarian agencies requires

- building trust, finding a common language and aligning goals;
- learning to listen while asking questions to identify knowledge gaps; and
- identifying the right partners, whether for disaster preparedness, response, recovery or broader risk reduction and disaster management work.

As crises escalate and funding gaps widen, it is more important than ever for all stakeholders—UN agencies, governments, NGOs, academia and businesses—to work together and leverage each other's strengths. More effective humanitarian action relies on real partnerships rather than collaborations with imbalanced power dynamics.

Logistics is at the core of every successful effort to reach vulnerable populations and disaster-affected communities. It thus offers immense opportunities for public-private partnerships to strengthen emergency preparedness, response and recovery. This case study aims to help different stakeholders identify their knowledge and skills gaps and work with professionals to address them—ultimately saving more lives and livelihoods.



# **INTRODUCTION**

Logistics is as essential to disaster management—and particularly humanitarian responses—as salt and spices are to cooking. When things run smoothly, few notice the effort behind the scenes. However, when things go wrong, stakeholders quickly appreciate the time and effort it takes to manage logistics, especially in emergencies.

But what exactly does logistics encompass? It entails a broad range of activities, from information-sharing to customs procedures, warehousing and transportation by air, sea and road. Logistics companies thrive by keeping their ear to the ground and leveraging their extensive network of employees and partners to stay ahead of real-time conditions. Is a road blocked? Is a port closed? Is an airport struggling with delays or capacity issues? Logistics companies such as Airlink Inc., DHL Group and Kuehne+Nagel solve problems on the go, with support from expert teams operating out of the affected country or from headquarters. Their goal is to ensure that humanitarian goods are picked up, processed, transported and delivered as efficiently and cost-effectively as possible.



Kuehne+Nagel supported a capacity scale-up for humanitarian response in Gaza. Here, a warehouse in Cyprus is shown with pallets of aid, May 2024. Photo credit: Kuehne+Nagel.



**66** COVID-19 set the tone for how important supply chains are. Before that, finance, procurement and supply chain logistics were expected to just happen. The disruptions of the pandemic shined some light on the critical role logistics plays in our everyday lives. **99** 



**Tina Kyndesen**Global Key Account Manager, Emergency and Relief Logistics, Kuehne+Nagel

One striking example of the role of logistics comes from Kuehne+Nagel's response to a crisis in Afghanistan. The company had to transport a convoy of lifesaving supplies from Copenhagen to Kabul by truck, an unusual transportation choice dictated by circumstances. The company had to map all border crossings along the route and determine which would allow trucks through and which would require supplies to be unloaded on one side and reloaded onto another vehicle on the other. Nationality-based restrictions were also an issue: Turkish truck drivers were allowed to enter Syria, for instance, but other nationalities were not. Despite these challenges, the convoy was ready to leave within 12 hours and reached Afghanistan in just four days, demonstrating the power of logistics.

Companies like Kuehne+Nagel typically provide two types of service for their private-sector clients:

- 1. Third-party logistics (3PL): managing shipments, warehouses and trucking services.
- 2. **Fourth-party logistics (4PL):** overseeing agile, integrated supply chains on behalf of clients, including order management systems and integrated logistics, tools, software and systems. For example, 4PL might involve managing shipments from an Asian factory to the Ministry of Health in Malawi.

Within the humanitarian context, the 4PL model is most valuable in post-disaster recovery, when demand is more predictable and easier to quantify. It extends beyond transportation, integrating humanitarian supply chains with freight forwarders for better cargo visibility and time savings. When humanitarian organizations harness the market insight of 4PL providers, their logistics strategies improve. Specific solutions will depend on the organization's strategy and its understanding of supply chains. One advantage of working with large logistics companies is that they help customers optimize their approach, such as choosing container shipments over chartered vessels or storing goods in marshalling yards and only distributing as needed.

66 Logistics partners ask a lot of questions because we have to fill out paperwork, get approvals and so much more that happens behind the scenes. Non-governmental and humanitarian organizations often don't understand wait times and how many moving parts are needed to get things moving.



Claire Leow
Regional Representative for Asia and the Pacific, Airlink



Airlink processing a shipment with United Airlines for the Hurricane Dorian response in 2019. Photo credit: Airlink.

Historically, logistics companies have been an integral part of the humanitarian system as providers of reduced-cost or pro-bono services. This is especially significant given that 60–80 percent of humanitarian costs stem from supply chains.

Speed and efficiency are paramount in disaster relief. The DHL Disaster Response Team typically deploys within 48 to 72 hours and focuses first on airports, the critical point of entry for emergency aid. They agree with the airport authority to use the ramp, warehouse space and any handling equipment needed to begin their operations. The goal is to keep the airport open, maintain normal operations and prevent congestion caused by sudden cargo surges, coordinating the extra work needed to handle the relief goods that are part of the emergency response. This approach prevents airports from becoming the weakest link in the relief supply chain.

One of the biggest challenges is to process aid and move it out of the airport as quickly as possible by either putting it into storage or, ideally, cross-docking it and handing it over to last-mile NGOs or other providers. But aid logistics extends beyond moving goods: aid comes in many forms, and supplies often need to be deconsolidated and reconsolidated for military or road transport, loaded onto trucks and connected to warehouses, which requires inventory and management.

**66** Airports are critical because we always need a point of entry for emergency aid, especially in larger countries. **99** 



**Carl Schelfhaut** 

Regional Head Asia Pacific, Disaster Preparedness and Response, DHL Group



The GoHelp Disaster Response Team helped move cargo at Lynden Pindling International Airport in Nassau as part of the response support they provided when they deployed to the Bahamas in 2019. Photo credit: DHL Group.

The changing nature of emergency logistics can pose particular challenges. This could be as innocuous as an item being damaged en route and then removed from a shipment for security reasons but not reflected in the flight manifest. In one such case, it was flagged to Airlink, and its logistics partner managed to solve the problem by combing back through the process to understand what had happened and identify the source of the error—an incredibly complex task.

Humanitarian organizations tend to specialize in search and rescue operations, aid delivery and coordination—all core competencies of the UN and government agencies. However, logistics is one area where the private sector excels.

In the aftermath of the 2023 Türkiye earthquakes, Airlink saved NGOs US\$3 million in logistics costs by negotiating and working with partners. This outcome was made possible by existing relationships and experience.

Logistics is all about foresight: planning ahead, anticipating risks, securing procurement contracts and agreements and establishing partnerships to ensure rapid responses when requests come in.

In April 2020, Airlink signed an agreement with Qatar Airways for the free airlift of 200 metric tons of relief supplies over two years. When the Beirut explosion devastated the city's port in August, causing a surge in demand for aid cargo, this advance arrangement meant that Qatar Airways transported 42.6 tons of supplies coordinated by Airlink, saving over \$250,000 in shipping costs.

This case study seeks to demonstrate why humanitarian agencies and businesses need to work together to solve logistics challenges to get aid faster to those who need it the most. What better reason to coordinate across sectors, from emergency preparedness to crisis response and recovery, than to save more lives and livelihoods?

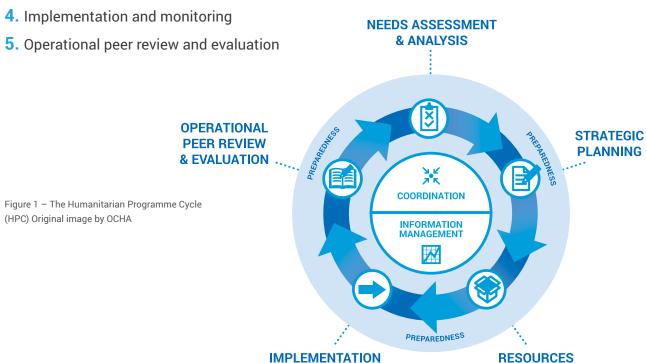


# LOGISTICS IN HUMANITARIAN AND DEVELOPMENT SETTINGS

### THE HUMANITARIAN SYSTEM

During emergency responses, the **Humanitarian Programme Cycle (HPC)** is a coordinated set of actions undertaken by humanitarian actors to improve the predictability, speed and effectiveness of their response to emergencies. It includes five phases (see Fig. 1 below):

- 1. Needs assessment and analysis
- 2. Strategic planning
- 3. Resource mobilization



More information about the HPC is available here.

Initial assessments are conducted by various agencies on the ground, which then partner with the UN system, led by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), as it seeks to understand needs and priorities.

**& MONITORING** 

**MOBILIZATION** 

However, ensuring resources are delivered to those in greatest need remains a challenge. While non-UN entities can act autonomously, their approach often leads to resources being distributed based on accessibility rather than need. As a result, a concerted effort is now being made to expand coordination beyond the UN and government partners by including the private sector—from local micro, small, and medium enterprises (MSMEs) through to multinational corporations.

In emergencies, the humanitarian system organizes response efforts into "clusters." These are groups of UN and non-UN humanitarian organizations responsible for coordinating different areas of humanitarian action, each of which is led by a designated UN agency. At a global level, clusters strengthen system-wide preparedness and provide the technical capacity to respond to humanitarian emergencies by facilitating predictable and effective crisis response. The humanitarian clusters and their lead agencies are as follows:

- Camp Coordination and Management (UNHCR and IOM)
- Early Recovery (UNDP)
- Education (UNICEF and Save the Children)
- Emergency Telecommunications (WFP)
- Food Security and Livelihoods (FAO and WFP)
- Health (WHO)

- Logistics (WFP)
- Nutrition (UNICEF)
- Protection (UNHCR)
- Shelter and Non-Food Items (UNHCR and IFRC)
- Water, Sanitation and Hygiene (UNICEF)

In any emergency, relevant clusters are activated based on the context, as determined by the Resident / Humanitarian Coordinator in close coordination with the Humanitarian Country Team (HCT) and national authorities.

While private service providers are typically not part of these clusters, there is an opportunity for ad hoc collaboration, and the logistics sector is a great example of why and how such partnerships matter.

The Kuehne+Nagel emergency coordinator arrived in Istanbul, Türkiye, within 72 hours of the 2023 earthquakes. Connecting with his local colleagues, he identified warehousing space and transport solutions available, which included a mapping of the region's roads and conditions, as well as customs requirements. That information was shared on a Logistics Cluster coordination call to support humanitarian organisations with their decision making and supply chain strategy implementation. Later that week, Kuehne+Nagel mobilized in the Gaziantep area to collect additional information that they also shared with the humanitarian logistics community.

Airlink is another provider that works closely with clusters, learning and sharing information to streamline efforts and reduce duplication, ensuring that limited resources are used efficiently.

Examples such as these support the case for collaboration between the Logistics Cluster and the private sector.



Kuehne+Nagel working alongside local customs authorities in Cyprus to respond to the humanitarian crisis in Gaza, May 2024. Photo credit: Kuehne+Nagel.



# THE PRIVATE SECTOR'S CONTRIBUTION TO LOGISTICS IN HUMANITARIAN RESPONSES

Local businesses are often among the first responders to crises as they are already on the ground. Multinational logistics companies rely on local staff to provide critical, real-time updates. As a result, within 24 to 48 hours of an event, these companies typically have an in-depth understanding of the impact on logistics infrastructure and supply chains.

For example, Kuehne+Nagel asks its local workforce for information, creates a situation report and shares it with both existing clients and the Logistics Cluster. The company may also deploy emergency teams on the ground depending on the severity of the crisis.

### **KUEHNE+NAGEL'S ALERT MECHANISM**

When a large-scale emergency occurs, Kuehne+Nagel activates its ALERT mechanism, which prioritizes shipments for dispatch. This system enables rapid scaling of the logistics response and helps gather essential information, which is then structured into emergency situation reports, or "sitreps". These are shared regularly at the onset of an emergency to reduce uncertainties and enable clients to plan and structure their responses.

As part of the ALERT mechanism, Kuehne+Nagel dispatches expert emergency and relief staff to train local colleagues on the specifics of humanitarian logistics, ensuring they have the knowledge they need to operate within a humanitarian situation. This programme expands Kuehne+Nagel's pool of humanitarian logistics experts while enhancing staff deployment options and facilitating knowledge-sharing.



The GoHelp Disaster Response Team managed warehouse space as part of the response support, they provided when they deployed to the Bahamas in 2019. Photo credit: DHL Group.

Most companies will not send staff to participate in crisis response without an invitation from the government of the country in crisis. Similarly, in most cases the United Nations will not deploy in support of an emergency in the absence of a request from national authorities. The sense shared by interviewed parties is that governments are increasingly handling emergencies independently—a positive sign for development, as it reflects increased local capacity and resilience.

Despite this, multinationals like DHL remain committed to supporting their local teams when needed. To that end, DHL has established a three-tier response system:



In the aftermath of Hurricane Otis, the National Center for Epidemiological Emergencies and Disasters (CENACED), the CBi Member Network in Mexico, mobilized 183 allied organizations for a more coordinated response. Photo credit: CENACED.

- Level 1: An international emergency, in which the UN steps in to support the government and logistics services are required.
- Level 2: A local or regional response to a crisis, in which local staff mobilize to provide crisis support, sometimes collaborating with local NGOs.
- Level 3: Remote deployment, an increasingly prevalent strategy in which DHL provides support from its headquarters to local staff or partners, often in conjunction with a level 1 or level 2 intervention.

**66** The coordination, execution and accountability of a deployment are as important as any other aspect, even if they don't always receive enough visibility. Efficient coordination and communication translate into an efficient response—both within DHL and in public-private partnerships. **99** 



**Mayyada Ansari** Global Head, GoHelp, DHL Group

Airlink operates similarly, putting its network on standby when an emergency arises. It monitors the scale of crises, assessing whether international assistance is requested and tracking whether partners are responding. At the response stage, Airlink works to solve the logistics puzzle by determining who needs what and from where. As a demand-driven organization, Airlink continues to assist NGO partners on the ground even after emergency protocols are lifted.



**66** We use commercial aviation where it is viable, but a big part of what we do hinges on Airlink's connections in the aviation and logistics sectors. This enables us to establish air bridges to forgotten crises such as Sudan, and crises that are no longer making front-page headlines such as Ukraine. **99** 



**Claire Leow**Regional Representative for Asia and the Pacific, Airlink



The Philippine Disaster Resilience Foundation (PDRF), the CBi Member Network in the Philippines, distributes relief items from Shell Pilipinas Corporation to families affected by Typhoon Kirstine in Bicol in 2024. Photo credit: PDRF.

A good example of Airlink's support came when Cyclone Lola hit Vanuatu in the Pacific. The Ministry of Education reached out to Airlink's partner in New Zealand who was on the ground to assess the safety of school structures. Airlink flew the additional staff to Vanuatu, where they inspected 153 establishments to ensure they were safe for children to return to and for communities to use for aid distribution.

Another example comes from the cholera outbreak that overtook Haiti in 2022, in the midst of a crisis that saw gang violence escalate and almost cut the country off from air access. In response, Airlink orchestrated six multi-agency charter flights from Miami to Port-au-Prince, consolidating aid from multiple organizations on each flight to lower the per kilo expense by 25%. Partnerships with the UPS Foundation for trucking and American Airlines Cargo for transatlantic airlift facilitated free first-mile transportation to the Miami hub, and a partnership with SEKO Logistics provided donated in-bond storage and logistical services. By strategically knitting together private sector resources, Airlink enabled NGOs to cost-effectively deliver 290 tons of life-saving aid, impacting over 137,000 lives.



The GoHelp team supporting the logistics of the response operation for the Malaysian Red Crescent during COVID-19 in 2021. Photo credit: DHL Group.

**66** Your supply chain is only as strong as its weakest link. Almost 70 percent of costs go to logistics and supply chain, according to the Philippine Disaster Resilience Foundation. **99** 



**Carl Schelfhaut** 

Regional Head Asia Pacific, Disaster Preparedness and Response, DHL Group

Similarly, DHL assisted the Red Crescent in Malaysia with warehouse management during COVID-19. Initially, operations were chaotic: there was no formal system in place, and everything was being done ad hoc. However, by mobilizing 50 volunteers and applying a 5-Sigma methodology, DHL organized the warehouse within three days while also training local staff on maintaining and managing the space.

The three companies interviewed offer services to the UN and NGOs at significantly reduced rates. This approach allows them to operate without jeopardizing their commercial activities while avoiding creating expectations that they will always provide transport or other services pro bono. All the same, DHL's GoHelp programme provides time and expertise free-of-charge during disaster response operations.



One example of these cut-price transportation services comes from Airlink. In response to Cyclone Chido in Mozambique, Airlink devised a plan to get a shipment of food from western Canada to the Cabo Delgado region. The challenge was to overcome seasonal airport capacity at origin, political protests blocking the last-mile access between Maputo and Pemba, and storm damage that hampered border crossings. Airlink secured donated trucking from Canada to the US, donated freighter airlift from the US to South Africa, and coordinated two trucks via Zimbabwe to reach a safe crossing to Mozambique. The shipment, which would have cost \$443,000 on the open market, came to just \$33,000.

Airlink does not run its own humanitarian programmes but instead supports partner NGOs in better implementing theirs, focusing on logistics. This efficient, "enabling" approach allows Airlink to assist many NGOs without having to vet individual projects itself. Furthermore, Airlink works with partners to build capacity year-round, ensuring it can respond effectively the moment a crisis happens. Its response approach centres on listening to people on the ground to better understand the needs of affected communities and analyse how best to meet them, as there is no such thing as a one-size-fits-all approach to disaster response.



After an earthquake in Caylloma in April 2022, CBi Member Network Hombro a Hombro provided aid to affected families in hard-to-reach areas. Photo credit: Hombro a Hombro.

Airlink's ongoing activities include training programmes and preparedness initiatives, such as pre-staging aid in local communities. Airlink also seeks to leverage regional strengths and partners' capacities, such as by moving responders and knowledge from Asia to other affected areas.

**66** While we know disasters will increase in frequency, the same cannot be said for the funding pot for the aid sector. That's one reason why it makes sense for the humanitarian system to collaborate with the private sector, because we can do a lot around cost efficiency and can carry over that knowhow through partnerships. **99** 



Cormac O'Sullivan
Global Director Emergency and Relief, Kuehne+Nagel



### **CHALLENGES IN DISASTER SETTINGS**

In many ways, every disaster is like starting over. People and governments change, yet much of the logistics in disaster settings relies on relationships. Disorganization is inherent to emergencies, meaning key questions must be asked every time: "Where will we be based? Do we need warehouse space? Who is our contact, and is it the same person as last time?" If it's not the same person, processes are likely to be different, too.

Partners on the ground don't always understand logistical processes and timelines. This often leads to demands for faster delivery, putting even more pressure on those trying to deliver supplies.

More broadly, **logistics** is a less appealing aspect of disaster response than areas like medical supplies. Funding is rarely allocated to it, largely because people tend to overlook how food or other critical supplies will get to where they are needed. This gap reinforces the adage that people "don't know what they don't know" and highlights the importance of fostering partnerships to bridge these gaps.

A key challenge is understanding what is needed on the ground and what will make a difference to those affected by crises. This requires continuous education and awareness-raising. For example, in 2023, Vanuatu was hit by Tropical Cyclone Lola – a category five and the third severe tropical cyclone to affect the country in 2023 after Tropical Cyclones Judy and Kevin. Local communities did not need food, however, as they were prepared, and even had tents ready to use as emergency shelters. What they did need were tent repair kits. Only organizations that took the time to ask the right questions and listen could offer meaningful assistance.



In 2020, through a partnership with Admiral Transport, the Philippine Disaster Resilience Foundation, a CBi Member Network, provided transport services for medical and health workers. Photo credit: PDRF.



Hombro a Hombro, the CBi Member Network in Peru, provided logistical support to the Government to distribute aid to hard-to-reach affected communities as part of their support to the response to El Niño in 2023. Photo credit: Hombro a Hombro.

People tend to prefer to give in-kind resources over money, often driven by concerns about potential corruption in the regions where the emergency is taking place. While well-intentioned, this preference frequently results in excessive or inappropriate goods being donated. For instance, people may donate easy-to-make food that aligns with their culture, not realizing that people suffering from a traumatic experience usually prefer familiar food. As such, if donations are sent across borders, as well-intentioned as they may be, the foods unfamiliar to those affected may well go unused.

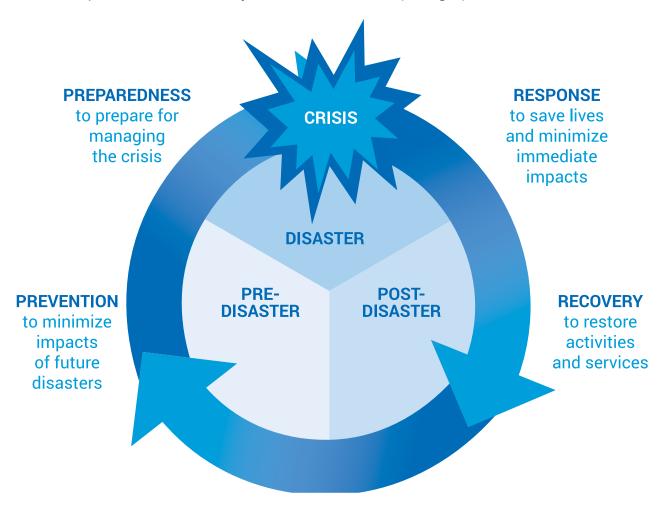
**Even more problematic is the spontaneous donation of unsolicited aid.** Every logistics company consulted reported managing warehouses full of equipment, clothing or food sent by individuals acting on their own initiative without guidance from humanitarian programmes. Sorting and organizing such donations requires resources that could be better used elsewhere, especially when these items may not be relevant to the crisis at hand. Raising awareness around this issue is essential.

There are misunderstandings within the humanitarian community about why logistics companies engage in disaster response efforts. The primary motivation is not financial gain but employees' desire to see their company's global network being used to support people. The value lies in the internal satisfaction of contributing—logistics companies offer their services at a much-reduced cost because they can and because they care.

While the aid sector is good at raising funds and sharing stories that put a human face to crises, not enough effort is made to explain the critical work being done on the ground by UN agencies and other organizations. This is a missed opportunity to showcase the strengths of these organizations and set up partnerships to connect expertise between sectors.

# EVERYTHING IS CONNECTED: LOGISTICS IN DISASTER MANAGEMENT

The disaster risk reduction and management process is conceptualized as a cycle that goes from pre-crisis prevention and preparedness through emergency response to post-disaster recovery. While these phases are distinct, they are all interconnected (see fig. 2).



 $\label{prop:continuous} Figure~2-The~disaster~management~cycle~goes~from~prevention~to~preparedness,~response,~and~recovery.$ 

Effective preparedness efforts often involve pre-positioning supplies in areas expected to be affected by disasters such as extreme weather events. However, this strategy must be set up and managed proactively. Non-perishable goods can be stored for years without issue, but what about rice or other staple foods? What will happen to stockpiles of rice if they are not distributed within five years? Will they be thrown away and thus wasted? Scenarios like this require management and an understanding of the complexities inherent in these situations.

In the field of logistics, an airline may be willing to use an idle aircraft to move supplies, but someone must still manage the logistics, knowing what goods need to be moved where. These considerations lie at the core of logistics in support of disaster management.



Emergency food assistance provided by the World Food Programme (WFP) reaches earthquake survivors in Pyinmana in the immediate aftermath of devastating earthquake in Myanmar, March 2025. Photo credit: WFP.

66 Many case studies about disasters expect stakeholders to plan ahead, and that's important, but the value we bring to the table is specific to humanitarian logistics: assessing needs, understanding what qualifies as critical cargo and ensuring the supply chain has undergone a thorough risk assessment. We always have a plan. 99



Tina Kyndesen

Global Key Account Manager, Emergency and Relief Logistics, Kuehne+Nagel

In the aftermath of the 2007 earthquake in Haiti, a DHL team was on the ground to help the airport streamline the arrival and departure of aid and supplies. At one point, the team was asked to load a charter aircraft with large boxes labelled "Handle with Care" that were arriving on regular trucks. As the first box was loaded, the airport fell silent as everyone stopped what they were doing. The DHL team were the only people who kept working, until they too realized what had caused the reaction: the boxes contained human remains. While logistics often seem to focus on practical, operational activities that are somehow disconnected from the reality being addressed, moments like these remind teams of the real, human impact of their work and why they are doing it.

66 When you see the devastation, no matter how hard you work to help, it's easy to find your morale quite low. It's human nature to wish you could have done more. That's why at DHL we rotate teams frequently, have twice-daily team debriefs, and make sure everyone knows there is on-going support if they need it. Mental health is critical for first responders.



**Kim Melville**Vice President of Humanitarian Affairs, DHL Group

In response to repeated calls for emergency support, DHL developed the Get Airports Ready for Disasters (GARD) programme (see box on p. 21). GARD addresses a request from airport managers for help in preparing better for crises rather than merely reacting to them when they arise.

The efforts implemented during emergency response cover immediate needs but also lay the foundation for longer-term recovery. For example, in the aftermath of the Türkiye earthquakes, CBi Member Network TÜRKONFED was part of a coalition that set up container cities. This had to be done quickly enough to assist the large numbers of people who had been displaced, but the design also needed to be carefully planned to allow the container cities to be more than just temporary shelters. The goal was to design spaces that fostered resilience by allowing residents to reconnect, rebuild their communities and access essential services—from educational spaces for children and psychosocial support to laundry facilities. For more on this this initiative, see the CBi Annual Report 2023.

Logistics plays a role in every step of the disaster management cycle. While the focus may shift from saving lives to saving livelihoods and re-establishing communities, logistics is integral to the entire process.



### DHL'S "GET AIRPORTS READY FOR DISASTERS" (GARD) PROGRAMME

DHL's <u>GARD programme</u> fosters disaster resilience by equipping airports to handle crises efficiently, taking an all-hands-on-deck approach. The company provides training and facilitates workshop discussions, while local partners integrate GARD into systemic collaboration between airports and governments.

The GARD methodology begins with an airport assessment, bringing together key government and airport stakeholders to prepare for inevitable crises—airport staff, airline employees, immigration officers and national disaster management agency personnel. The goal is to ensure airports can handle operations efficiently and cost-effectively during a humanitarian emergency, when the volumes they typically manage may double or even triple. Given that airports sometimes struggle to act without government enforcement, GARD provides a platform for holistic airport readiness during a humanitarian response.



A GARD training was carried out at Jorge Chavez International Airport, Lima in Peru in 2014. The country remains a best practice example in terms of implementing the programme. Photo credit: DHL Group.

As the GARD trainer, DHL does not so much run workshops as co-create them, facilitating discussions among participants. These are selected by airports and governments themselves and viewed as GARD programme co-owners. They often comprise a diverse mix of local humanitarian experts and airport personnel who play an essential role in creating a holistic action plan for disaster resilience. Initial workshops usually last 3 to 5 days, depending on the size of the airport, and are conditional on airports and governments first committing to implement any recommendations that emerge.

Afterwards, GARD trainers help classify these recommendations into three groups: 1) low-cost, high-impact actions, 2) reasonable-cost, high-impact, medium-term priorities, and 3) longer-term considerations (e.g., extending runways or reconfiguring infrastructure).

A long-standing partnership between DHL Group and UNDP, GARD workshops are initiated in disaster-prone countries in two ways: either UNDP reaches out to a country office to suggest running a workshop or the local government or airport authorities express an interest in doing so and commit to implementing any recommendations proposed. To date, over 60 GARD workshops have been conducted in 29 countries and territories, building the skills of more than 1,700 airport staff.

A year after the initial workshop, a GARD+ follow-up workshop assesses and reports on the implementation of the action plan. Due to high turnover among airport staff and authorities, GARD+ now includes a reorientation segment.

Two examples of best practices of GARD implementation come from Peru and the Philippines. In Peru, Lima was the first airport to participate in the programme. Authorities were eager to do so following two positive experiences with DHL Disaster Response Teams in the previous five years. Three more airports followed suit, and then a "train the trainer" course was organized, leading the Peruvian Government to expand the initiative to three more airports and request GARD+ support. GARD has since been integrated into Peru's national disaster management policy and established in law, and Peru has been showcased as an example of best practice at every GARD training session since.

Similarly, three airports in <u>the Philippines</u> implemented GARD with the support of the Philippine Disaster Resilience Foundation, a CBi Member Network. There are now plans to scale the programme nationwide.



Another GARD training was carried out at Alfredo Rodriguez Ballon International Airport, Arequipa in Peru in 2022. The country remains a best practice example in terms of implementing the programme. Photo credit: DHL Group.



# RECENT CRISES AND THE ROLE OF LOGISTICS

Globalization has meant that most crises are no longer self-contained but instead have widespread ripple effects. The war in Ukraine, for instance, has had far-reaching implications, disrupting grain harvests and exports, which Europe and countries as far away as China relied heavily on.

Within the country, local teams had to keep informed because any city or area could become more or less dangerous at any point in time. Requests for logistics were incredibly varied, sometimes involving the transport of a five-tonne generator, a 500,000 kilogram gas turbine, or heavy equipment in 15 pieces. As so often, there are no standard solutions — and although logistics teams are good at thinking on their feet, they also do extensive research.

**66** I find myself Googling all sorts of things, like the dimensions of trash cans, because we had to figure out how to deliver 150 containers filled with thousands of them. It was amazing to realize how many trash cans were needed in Ukraine, and it was up to us to figure out how to fit them into containers, load them and unload them, and get them to where they needed to be. **99** 



**Tetiana Zhukova** Sea Logistics Manager, Kuehne+Nagel

Organizations like Airlink facilitated the equivalent of one humanitarian shipment every three days. In 2023, they reached 1.7 million people in Ukraine and surrounding communities, working with over 60 NGO partners to move 2,300 tons of aid supplies and 1,200 trained emergency responders. Their efforts saved approximately \$9 million in logistics costs for NGOs. Given the long-term nature of the humanitarian response to the war, Airlink encouraged using sea freight, a more environmentally friendly and cost-effective solution.

When earthquakes struck Türkiye and Syria in February 2023, many shipments were delayed at Turkish customs due to paperwork issues. Kuehne+Nagel's local team leader developed a best practice guide and sent it to headquarters to be circulated to prevent future delays. For example, the guide recommended avoiding sending used goods as there were severe restrictions on importing these: clearance required approvals, reference numbers and a consignee on commercial documents. Undeclared cargo was also a no-go, as authorities needed to know what was in every pallet.



In 2022, The Asia-Pacific Alliance for Disaster Management Sri Lanka (A-PAD SL) provided ration packs for families and school stationary to help reduce dropout rates. Photo credit: A-PAD SL.

**66** We shared regular updates on road and infrastructure conditions with government officials. For example, Hatay airport was destroyed but became operational again within a few days, and Escandar seaport was closed, requiring us to reroute through Mersin seaport, using special quay options to bypass heavy procedures. **99** 



**Mert Ozgun** National Project Logistics Manager, Kuehne+Nagel

Low-bed trucks that reached the earthquake zone often became stuck because they were carrying construction machinery. The Government prohibited offloading due to the risk that the vibrations from these machines operating could bring down buildings on the verge of collapse. Because the Kuehne+Nagel team understood the situation on the ground, they were able to explain the restrictions to partners and manage frustration. At the same time, they used their network of truck owners to secure additional vehicles to support local commercial customers and NGOs.

In another example, the UN invited DHL to send two Disaster Response Team members to carry out an assessment. As neither Adana nor Gaziantep airport required external assistance, this support was provided remotely, making it a hybrid deployment. In such cases, DHL representatives work closely with the United Nations Disaster Assessment and Coordination (UNDAC) and the International Search and Rescue Advisory Group (INSARAG) teams, as well as in-house country heads or teams, to assess needs and see how best to respond to them.

In the Philippines, the Mayon volcanic activity in July 2023 saw more than 20,000 individuals displaced and relocated to evacuation centers. The Philippine Disaster Resilience Foundation (PDRF), a CBi Member Network, collaborated with the League of Corporate Foundations to provide over \$7,500 worth of in-kind donations ranging from ready-to-eat meals, bread, water, and boxes of soap. FedEx provided logistics support to distribute the goods to the affected population.

When Hurricane Otis struck Acapulco and surrounding areas in Mexico, the Centro Nacional de Apoyo para Contingencias Epidemiológicas y Desastres (CENACED), a CBi Member Network, mobilized the private sector and other organizations, over 180 partner organizations in total, to support the response. CENACED has been appointed to manage the Federal Government's <u>rapid</u> response warehouse for emergencies, a role supported by UPS.



Rescuers ferry stranded residents while other people wade on Ortigas Avenue in Cainta Rizal, Philippines, due to massive flooding caused by Typhoon Ondoy in 2009. Photo credit: Edwin Bacasmas of Inquirer via the PDRF.



# LESSONS LEARNED AND KEY TAKEAWAYS

This case study highlights the immense potential of cross-sector partnerships, particularly in logistics, when such collaborations leverage different stakeholders' strengths.

Building effective partnerships requires trust, a shared language and common goals. While some collaborations may involve procurement or financial investment, others rely on remote support and in-kind contributions—although in the logistics sector, the latter approach is typically linked to internal initiatives benefiting employees or their communities.

The main takeaway is deceptively simple: we must learn to listen and ask the right questions to understand what we don't know. Only then can we identify the right partners to work with, whether the collaboration focuses on disaster preparedness, response, recovery or broader disaster risk reduction and management efforts.

66 Three of our biggest lessons learned when it comes to disaster management and logistics are that first, we cannot assume partners understand what we do or what is at stake, so communication is key; second, there is no one-size-fits-all approach; and third, listening to community needs and sharing them back to our business partners is essential. 99



Jennifer Torner

Former Humanitarian Programs Manager, Asia and The Pacific, Airlink

Another key insight from the interviews carried out for this case study concerns sustainability. While this topic is not addressed in depth here, omitting it entirely would be remiss. Like many industries, logistics must evolve to become more sustainable. Many companies are already working towards carbon-neutral warehouses, starting with improving waste management systems and adopting more sustainable packaging. Another promising area is sustainable aviation, led by advances such as biofuels that reduce carbon dioxide emissions. However, building green supply chains remains a challenge. Transport accounts for as much as 80 percent of emissions for some products, making it essential to rethink warehouse locations for optimal distribution and explore local and regional supply chain solutions to reduce environmental impact.



**66** Longer-term, as a sector we need to address emissions and talk about sustainability, how to make logistics green. We'll always respond to emergencies, but ideally, we would also be doing as much as we can ahead of time so we can respond in a more efficient, environmentally conscious way.



**Tina Kyndesen**Global Key Account Manager, Emergency and Relief Logistics, Kuehne+Nagel

While sustainability in the context of disaster management extends beyond logistics, it aligns with ongoing efforts to take a more local approach to disaster preparedness, response and recovery. This intersection with humanitarian and development initiatives may present another opportunity for collaboration.



Multipurpose building and evacuation center built in the Philippines after Super Typhoon Haiyan decimated the country in 2013. Photo credit: PDRF.



## **LOOKING AHEAD**

With crises escalating and funding gaps widening, it is more important than ever for all stakeholders—UN agencies, governments, NGOs, academia and businesses—to work together in ways that play to each other's strengths. More effective humanitarian action relies on real partnerships rather than collaborations with imbalanced power dynamics.

66 The private sector is specialized. Efficiency and effectiveness are core to its mandate, regardless of the sector, and it has strong local networks. Discounting business simply because it does not have the same mission as humanitarian organizations is a missed opportunity. When crises occur, people want to help regardless of their industry. Expanding on this overlap, giving the private sector a role to support and leverage its expertise, knowledge and resources, can go a long way to enhancing humanitarian efforts and impact. 99



**Claire Leow**Regional Representative for Asia and the Pacific, Airlink

Since logistics is at the core of any successful effort to reach vulnerable populations and affected communities, the sector represents significant opportunities for public-private partnerships to strengthen emergency preparedness, response and recovery efforts. We hope this case study will help stakeholders identify their knowledge and skills gaps and explore ways to collaborate with logistics professionals to address them and thus save more lives and livelihoods.

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