# Chapter 11 The Role of Logistics Operations in Humanitarian Aids: Lessons Learned From the Syria Crisis

### **Islam Abdelbary**

https://orcid.org/0000-0003-1727-9071

Arab Academy for Science, Technology, and Maritime Transport, Egypt

### Rasha Hassan Elshawa

Faculty of Economics and Political Science, Cairo University, Egypt

### **EXECUTIVE SUMMARY**

Logistics in humanitarian aid is critical for effectively utilising humanitarian operations and initiatives. This chapter tries to explain the important role that humanitarian logistics plays in relief efforts. It uses the Syria crisis as an example to evaluate the performance of humanitarian logistics in Syria, especially in the healthcare sector. Over 470,000 people have died in the Syrian Civil War, and half of the country's population have been forced to leave their homes. The study determined the humanitarian logistics gaps and bottlenecks in Syria, such as physical access restrictions, a lack of logistical information, operational challenges, the need for integrated logistical coordination, and the increasing need for specialised logistical capacity-building programs. After explaining humanitarian logistics implementation in the healthcare sector in detail, the research draws on the lessons learned and drives recommendations for the future of the Syrian operation itself and identifies best practices for other operations in any humanitarian intervention.

### 1. BACKGROUND

The concept 'logistics' initially began as a military term, which refers to the process of getting and delivering equipment and supplies to troops (Tomasini et al., 2009). Because of the increasing complexity

DOI: 10.4018/978-1-6684-4686-7.ch011

of supplying businesses with materials and shipping out products in the 1950s, logistics has grown as a business concept. Currently, it is defined as the efficient flow and storage of goods from the point of origin to the end of consumption. Logistics has become a vital part of supply chain management utilised to plan, implement, and control the flow and storage of goods and services to meet customers' requirements(Sahay et al., 2016).

Humanitarian logistics (HL) is a type of logistics that focuses on the crisis management system's preparations and response stages. HL can be defined as the process of planning, implementing, and controlling the efficient, cost-effective flow and storage of goods and materials, as well as associated information, from the point of origin to the point of consumption to alleviate the suffering of vulnerable people (Regis-Hernández et al., 2022). The role covers a variety of tasks, including planning, procurement, transportation, warehousing, tracking and tracing, and customs clearance.

Logistics operations in humanitarian aid are critical for effectively utilising humanitarian operations and initiatives. The disaster risk management cycle includes three main stages: Pre-disaster, disaster response, & post-disaster. The pre-disaster phase is concerned with assessing all the potential risks and mitigating and preventing the risks. It is also called the preparedness phase. Once the disaster strikes, all humanitarian efforts are focused on evacuation, saving people, and providing immediate assistance. In this phase, the damage is assessed. Post-disaster, ongoing assistance is obtained, including restoration of infrastructural services, economic and social recovery, and ongoing development activities.

During the pre and post-disaster periods, these logistical systems are typically required to buy, store, and transport food, water, medication, and other supplies, as well as human resources, vital machinery and equipment. Because the diversity of logistical operations involved in disaster relief is wide, humanitarian logistics is the most expensive component of disaster relief efforts, accounting for roughly 80% of total costs(Nikbakhsh & Farahani, 2011).

Therefore, this chapter attempts to clarify the critical role of humanitarian logistics in relief efforts, with an application to the Syria crisis, where the humanitarian response to it has been one of the largest in living memory. The scale of this crisis continues to require a large-scale, sustained and comprehensive response from the humanitarian community to provide the affected population with critical cross-sectoral assistance.

Based on this background and through content analysis of the available literature, the overall objectives of this study are:

- To highlight the humanitarian logistics strategies. The strategies proposed in this study can develop the ability to respond more quickly to the crisis so that its effect decreases and assistance operations are facilitated.
- To assess the performance and the logistics activities undertaken in Syria, especially in the health-care sector, to support the humanitarian community in reaching people in need of assistance. The operation is assessed in terms of the degree to which it was relevant, effective and efficient in identifying the gaps and addressing the needs of the humanitarian community.
- To draw lessons and recommendations from the Syria crisis related to logistics business for further improved performance in the future in the country and other areas under military conflicts through the identification of best practices across operations.

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-role-of-logistics-operations-in-humanitarian-aids/319409

## **Related Content**

### Data Mining for Internationalization

Luciana Dalla Valle (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 424-430).* www.irma-international.org/chapter/data-mining-internationalization/10855

### Program Comprehension through Data Mining

Ioannis N. Kouris (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1603-1609)*. www.irma-international.org/chapter/program-comprehension-through-data-mining/11033

# "I Would Like Other People to See His Stories Because He Was Woke!": Literacies Across Difference in the Digital Dialogue Project

Julie Rustand Sarah Alford Ballard (2020). *Participatory Literacy Practices for P-12 Classrooms in the Digital Age (pp. 115-138).* 

www.irma-international.org/chapter/i-would-like-other-people-to-see-his-stories-because-he-was-woke/237417

### Architecture for Symbolic Object Warehouse

Sandra Elizabeth González Císaro (2009). Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 58-65).

www.irma-international.org/chapter/architecture-symbolic-object-warehouse/10798

### Data Mining with Cubegrades

Amin A. Abdulghani (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 519-525).* www.irma-international.org/chapter/data-mining-cubegrades/10869