

## Chapter 6

# Logistics Providers in Syria Humanitarian Operations

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### ABSTRACT

*Logistics providers have become an important element in completing humanitarian relief work in countries experiencing armed conflict. Delivery aid assistances need to build logistics capacity and critical supply chain functions that help to meet the unconfirmed requirements of beneficiaries at right place, on right date, and with right fees. To reach the research goal, the authors will determine the weights of customer requirements (CRs) using the DEMATEL method, which considers the influences of inconformity and the causal relationship between CRs. This chapter employs quality function deployment (QFD) to integrate the voice of CRs and supplier criteria TRs using house of quality charts. This chapter focuses on case of humanitarian organizations collaborate with logistics service providers (LSPs) to maintain and enhance their performance by identify the crucial factors that effect on LSPs selection and their specified from the perspective of humanitarian relief organizations activated in Syrian humanitarian operation.*

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## **INTRODUCTION**

Since the 1950s, the number and magnitude of disasters have grown exponentially, the number of affected people has grown in proportion (about 300 million persons per annum on the average since the 1990s) and the annual damage costs have risen to about 0.17 per cent of the world GDP (Guha-Sapir, Hoyois, & Below, 2014). The increasing number of disasters and complex humanitarian emergencies put pressure on humanitarian aid agencies to deliver humanitarian aids in an appropriate and cost-effective way (Kovacz and Spens, 2007). Although, faster deliveries can substantially reduce suffering of beneficiaries in need (Perez-Rodriguez and Holguin-Veras, 2016), but disasters create a massive demand for relief aids that include food, medicines, shelter, water and other resources without prediction and expectation which leading to limited preparation for mitigating the same.

In this respect, various humanitarian organizations collaborate with logistics service providers (LSPs) to maintain and enhance their performance. Nevertheless, there is little knowledge which describes what are the important factors for selecting LSPs. The question remains: how can HOs select the most appropriate LSP for humanitarian operation? Despite its practical significance, no explicit effort has been done to identify the criteria/factors in prioritizing and selecting LSPs for humanitarian relief. Therefore, there is an urgent need for an integrated approach to review the selection indicators of LSPs in the humanitarian sector because of the LSPs' roles in humanitarian relief has now gained much attention from practitioners, as well as from the academic community (Vega and Roussat 2015).

In despite that, there is lack of research in terms of LSPs selection approach; originally developed for commercial activities; which can be applicable in the context of humanitarian operations (Holguín-Veras et al. 2012; Swansson and Smith 2013). This study aims to identify the crucial factors that effect on LSPs selection and their priorities from the perspective of humanitarian relief organizations and to explore how these were implemented and practiced (Roh, Jang, 2018).

In fact, selecting LSPs can be challenging for relief organizations due to the complexities and uncertainties in humanitarian supply chains (Balcik et al., 2010). The problem of specific selection is a multi-criteria decision-making problem involving both qualitative and quantitative performance measures. Some researchers (e.g., Abidi et al. 2015; Kabra and Ramesh 2015) have applied Analytic Hierarchical Process (AHP) based MCDM method to selection-related humanitarian issues and assumed the used criteria to be independent. In the real world, however, the selection criteria are seldom independent, but always have some sort of interrelationships among themselves with cause and effect relationships (Ramkumar et al. 2016; Sharma et al. 2017). Usually, several conflicting criteria make the supplier selection problem a complex problem. It is often desirable to make a compromise among the conflicting

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