

## Chapter 11

# Characterization of the Key Actors Involved in Humanitarian Supply Chains at the Local Level From a Theoretical and Academic Perspective

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### **ABSTRACT**

*The incremental trends in the amount of human and material losses, added to a higher frequency of natural disasters, have generated greater interest from different sectors regarding the processes of disaster management. In this sense, it is recognized that the context of disasters is strongly marked by the high diversity and quantity of actors which seek common or conflicting objectives. The aim of this chapter is to present the actors involved in the humanitarian supply chains (HSC) and to highlight the importance of key local actors involved in disaster preparedness and response, the latter from an inter-sectoral perspective towards the importance implied by the coordination of the key actors in terms of the humanitarian purposes. The discussion developed allows for the inference about the critical role of local actors in disaster management and HSC, as well as several topics for the theoretical development of humanitarian logistics, such as the application of decision tools and information technologies, and the use of sustainability approach for disaster management.*

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## **INTRODUCTION**

Disasters are considered a serious disruption of a community of society and causes a strong impact on people, structures, and the environment, which exceeds the ability of local resources to cope with it (UNISDR, 2004; Hadiguna, et al., 2014). With this in mind, the global increase in the number of natural disasters highlights the need for better planning and operational management of the responsible agencies, as well as greater interest from the academic sector (Afshar and Haghani, 2012; Ransikarbum and Mason, 2014).

Logistics management of disaster relief operations, also called humanitarian logistics (Baldini, et al., 2012), encompasses the estimation, provision, storage, transportation, distribution and coordination of people, goods (such as food, drinking water, medicine and shelters), equipment and services in order to assist the population affected by a disaster (Mohan, et al., 2013; Day, 2014; Sharif and Salari, 2015). The main objective of humanitarian logistics is to provide emergency supplies quickly to reduce deaths and human suffering (Balcik and Beamon, 2008; Hasanzadeh and Bashiri, 2016).

Humanitarian logistics is framed within disaster operations management, which is comprised of four stages: mitigation, preparedness, response and recovery (Altay and Green, 2006; Van Wassenhove, 2006). Within these stages, it must be remembered that diverse resources and capacities are required for the pre- and post-disaster stages, given that different types of disasters need to be managed in different ways (Cozzolino, 2012; Owusu-Kwateng, et al., 2017; Rodríguez-Espíndola, et al., 2018).

Additionally, the complexity in humanitarian logistics is strongly marked by the high diversity and quantity of actors that are involved in preparedness and response processes, since each have different objectives, cultures, interests, capacities and logistical experience (Balcik, et al., 2010; Kumar and Havey, 2013; Yadav and Barve, 2015; Regis-Hernández, et al., 2017). According to Cozzolino (2012), key actors can be categorized as: governments, military, aid agencies, donors, non-governmental organizations (NGOs), and private sector companies.

However, inter-organizational coordination in humanitarian logistics remains as a research topic to be developed (Cozzolino, 2012; Anaya-Arenas, et al., 2014). In this regard, Remida (2015) recognizes the importance of new research that takes into account the complexity of humanitarian logistics from a systemic approach, which would allow for the consideration of all aspects and elements involved in disaster management.

Based on the aforementioned elements, the aim of this chapter is to briefly present the key actors engaged in the humanitarian supply chain (HSC) –considering their main functions within a complex and dynamic system–, as well as highlight the importance of the local actors involved in the different disaster management stages. For this, we will be applying the main theoretical and investigative contributions provided by the study of humanitarian logistics throughout our discussion in this chapter.

The remainder of this document is organized in the following way: in the next section, the complexity of disaster management is described; this complexity must be considered when developing a systematic approach required to lead humanitarian efforts. Later, main aspects that characterize the key actors in the HSC are shown, as well as the critical role that local actors play in a disaster scenario and in the zones that characterize higher levels of disaster risk. Complementing the conditions that affect participation of local actors, an analysis of local level participation and presence will be done. Finally, some research trends related to humanitarian logistics, future research proposals, and conclusive comments on the topics discussed will be presented at the end of this chapter.

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