

# HUMANITARIAN SUPPLY CHAINS: MANAGING RISKS IN DISASTER MANAGEMENT CYCLE

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## ABSTRACT

**Purpose:** Humanitarian logistics play an integral role in disaster relief operations and it is important that countries respond swiftly and effectively when disasters strike. The aim of humanitarian logistics is to provide critical relief supplies to alleviate human suffering and deprivation, and when a country is faced with a disaster, it is paramount for the country to provide aid effectively and efficiently. As with commercial business supply chains, there are also risks involved in humanitarian supply chains. While risks cannot be eliminated, it is possible to reduce risks of adverse impacts. By identifying potential risks in the Disaster Management Cycle (DMC), it aids relevant stakeholders in decision-making to achieve the managerial objectives of humanitarian logistics. This project aims to uncover the risks in DMC by comparing commercial business supply chains and humanitarian supply chains, and explore how these risks be effectively mitigated. The research questions in this study are: (1) What are the types of risks involved in the DMC? (2) How are the risks different from the risks involved in commercial business supply chains? (3) How can the risks in the DMC be effectively mitigated?

**Design/methodology/approach:** A systematic review of the extant literature will be conducted to explore the concept of risk in humanitarian logistics and supply chains vices those encountered in the commercial supply chains. Primary and secondary data will be used to address the research questions. Primary data includes structured or semi-structured interviews with key players and stakeholders of humanitarian supply chains, while secondary data includes archival reports and publications.

**Findings:** A diagramming of the process maps will be used to understand the flow of a typical humanitarian supply chain, which can be used for the risks identification in the DMC. An impact analysis of the identified risks will be conducted to classify and assess the risks accordingly. After which, appropriate recommendations can then be made for each risk group in order to mitigate them effectively within the DMC.

**Practical limitations/implications:** The use of a recommended matrix for risk mitigation and prioritisation can help practitioners in the humanitarian context to make informed risk mitigation decisions in both the preventive and response phases.

**Originality/value:** This study will provide insight on risk mitigation and prioritisation in the DMC.

**Keywords:** Humanitarian Logistics, Supply Chain Management, Disaster Management Cycle, Risk Mitigation and Systematic Review