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One Size Fits All?
Using Standard Global Tools in Humanitarian Logistics

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Abstract

Reporting on a study undertaken in cooperation with International Federation Red Cross Red Crescent (IFRC) the paper contributes to the understanding of using standard global tools in humanitarian logistics. We present three case studies of disaster response in Haiti, Turkey and the Ivory Coast with particular attention to (1) Future requirements to humanitarian supply chains; and (2) IFRC Global Logistics Services' use of standard tools in different local contexts. A cross case analysis concludes with initial implications for practice and further research.

1. Introduction and purpose

Humanitarian logistics is about preparedness (preparing for disaster including developing competence, pre-positioning of stocks etc.), response (during a disaster), and recovery (getting back to normal state). Typical assistance required in the aftermath of a disaster to stabilize a community after search and rescue is temporary shelter, health support, water and sanitation, food and cooking equipment. In total close 22 billion USD was spent in 2013 on international humanitarian response [1]. Logistics account for up to 60-80% of total cost and there is much room for improvements [2]. Lack of funding, particularly for preparedness, makes it difficult for responding agencies to plan and run good operations. A commonly quoted statistic says that 1 dollar spent in preparedness

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activities is worth 7 dollars in response. Increasing prices of food and fuel, lack of information about needs, lack of coordination, local and international capacity, and competence are some of the causes resulting in high costs and fewer people being helped [3].

Following the response to the Asian Pacific Tsunami and Hurricane Katrina in 2005, research within humanitarian logistics has attracted great interest. Much however, is accused of lacking relevance [4]. In line with logistics in general [5] and other management research [6], it is pointed at the gap between research and practice. Some research laboratories and projects answer the call for more useful research by working closely with the humanitarian sector and directly responding to commissioned projects calls. Disseminating this research in scientific journals is challenging, both because of time constraints and because the scientific community is sceptic, questioning its rigor [7]. Action research (AR), i.e. experiments on real problems designed to assist in solutions is one possible approach. Here the researcher involves highly in an iterative process of problem identification, planning, action, and evaluation intending to contribute to academic theory as well as practical action [8]. AR is a 'scientific approach to study the resolution of important social or organizational issues together with those who experience these issues directly' [9].

Through research undertaken during the past 7-10 years, the authors have focused on field studies and development of tools with a high attention to relevance. Among other challenges, we have worked with (a) The importance of understanding of humanitarian needs, i.e. demand, in disaster preparedness and response to improve planning and preparedness and thus efficiency and effectiveness and; (b) How the local community in disaster areas are able to cope, how they can improve, and for what they need assistance, particularly regarding the organizations' use of standard global tools and how they fit with the local context.

In response to (a) A preliminary concept and prototype of a demand-forecasting tool was developed [10]. The International Federation of the Red Cross and Red Crescent Societies (IFRC) tested the prototype when they developed their five-year logistics strategy using the data as a basis to calculate activities with according preparedness and response requirements in each region [11]. IFRC is currently implementing this strategy. In response to (b), the authors undertook case studies, requested by IFRC, of three different disaster responses to analyze present local capacity and alternatives for the future to test conclusions from a general business case developed by IFRC and which also used results from (a) [12]. This paper reports on the latter project.

1.1. Purpose of this paper

With the purpose of understanding how disaster prone countries can prepare for disasters by building their own logistics competence and capacity, and for what they need international assistance, this paper focus (1) Main requirements important for design of future disaster response and preparedness supply chains; and (2) Use of standard tools offered by IFRC as a logistics service provider and how these adapt to local contexts.

In this study we do not focus on Sphere standards, but on organizational standards developed by IFRC, and in particular those of logistics relevance.

1.2. Research design

The study reports on three case studies of IFRC responses to the Turkey Earthquake in 2011, the Haiti Earthquake in 2010, and the Civil Unrest in Ivory Coast in 2011. IFRC selected the three cases to represent different disaster types and sizes, different strengths of National Societies, and different geographical regions. The studies are part of a long-term cooperation with IFRC using action research. Also called design science [13], action research is used in management information systems (MIS) [14], but less in supply chain management. Following recommendations by [15], this study took the following measures to secure rigor and appropriate documentation of the research process:

1) *Design*: Research questions and the purpose of study were formulated. Key aspects included treating the unit of analysis as an active object, and presenting the case context, i.e. its boundaries.

2) *Data Collection*: Case study protocols for each study describe how data was collected. Great care was taken in developing interview guides to secure comparable results. We used triangulation with multiple methods for data collection and analysis. The team-based approach used increases reliability of data, provided different skills and