

# Chapter 54

## Mapping Sustainable Tourism Into Emergency Management Structure to Enhance Humanitarian Networks and Disaster Risk Reduction Using Public– Private Partnerships (PPP) Initiatives in Himalayan States: The Global Supply Chain Issues and Strategies

**Naveeta Panwar**  
*Doon University, India*

**Dikshit Uniyal**  
*Doon University, India*

**Krishna Singh Rautela**  
*Doon University, India*

### **ABSTRACT**

*The overall aim of the paper is to analyze supply chain performance in humanitarian context, in aligning with PPP interventions for Himalayan States. A preliminary Framework for Performance evaluation of private and public actors, with seven constructs has been formulated viz. Mutual Coordination; Risk Management; Organizational Structure; Humanitarian Operational Assessment; Service Quality; Operation Flexibility; Humanitarian Logistics cost has developed for Humanitarian operations in*

DOI: 10.4018/978-1-5225-6195-8.ch054

*Himalayan region. Five Hypotheses were tested using Confirmatory Factor Analysis (CFA). The results show that PPP efficacy in humanitarian logistics enhances the sustainability of local economy. Implementation of Public Private Partnership (PPP) as a new strategy in managing disaster, the study suggest that they should complement each other with certain characteristics such as: (1) Mutual Coordination; (2) Shared Risk and Profits/ Benefits; and (3). Organizational Arrangement and it should also support the sustainability of Tourism industry.*

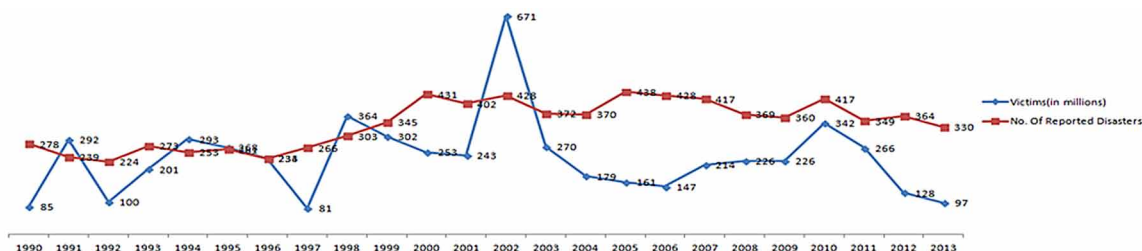
## 1. INTRODUCTION

Mismatch between urbanized growth and adverse climate change pushed the world population to suffer more the action of natural disasters (UN, 2012). In the recent past, the occurrence of natural disaster got drastically increased (400 per year, between 2002-2011, caused numerous physical damages and took 110,000 lives) and the disaster impact <sup>1</sup> is also increases significantly due to complex emergencies and disasters with the average (Guha-Sapir et al., 2013). Figure 1 depicts reported disasters since 1990 to 2013.

There is an urgent need to focus on building resilience through disaster preparedness and readiness, improving response and ensuring proper recovery and reconstruction. The existing literature lacks the application of Operation research and Management Sciences, particularly in Logistics Management. The approaches adopted are restricted to the usage of Emergency Management or Humanitarian aids<sup>2</sup>, at limited levels. From logistics perspective, previous research has restricted their focus on characteristic of network and its ability to fix the damages (save lives, alleviate suffering and maintain and protect human dignity), after disaster occurred. In past researches, there is least discussion on the nature, mode and flow of traffic demand, Post Disaster. Table 1 reflects on types of Disasters, its definition and types.

Few Theoretical Models based on resource allocation in order to assess the ability of logistics system to fulfil the demand during and post –emergencies/disasters can be developed. The development of such models would encompass operational research and logistics theories along with already proposed models to estimate the nature of travel demand and assist decision makers to manage emergencies at both operational (ensuring traffic flow) and strategic (repairing the damaged network). Humanitarian logistics networks realize relief item flows from stationary relief item warehouses via several hubs (existing or developed) to the beneficiaries within disaster areas. Their setup and operations comprises several activities and the execution of these activities can be more efficient and effective if analytical models are applied. Due to high risk-return trade-off, Public private partnerships (PPP) gained popularity in developing Countries (Steijn et al., 2011, Jing and Besharov, 2014). In recent past, Governments encourage

*Figure 1. Number of reported disaster and victims (in millions)*  
(Adopted from: ADSR, 2013).



21 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/mapping-sustainable-tourism-into-emergency-management-structure-to-enhance-humanitarian-networks-and-disaster-risk-reduction-using-public-private-partnerships-ppp-initiatives-in-himalayan-states/207620](http://www.igi-global.com/chapter/mapping-sustainable-tourism-into-emergency-management-structure-to-enhance-humanitarian-networks-and-disaster-risk-reduction-using-public-private-partnerships-ppp-initiatives-in-himalayan-states/207620)

## Related Content

---

### Identifying Accident Factors in Military Aviation: Applying HFACS to Accident and Incident Reports of the German Armed Forces

Marco Michael Nitzschner, Ursa K J Naglerand Michael Stein (2019). *International Journal of Disaster Response and Emergency Management* (pp. 50-63).

[www.irma-international.org/article/identifying-accident-factors-in-military-aviation/233881](http://www.irma-international.org/article/identifying-accident-factors-in-military-aviation/233881)

### Livelihoods Vulnerability to Climate Change Among Households in Baringo County, Kenya

Maurice Manyonge Pepela, Ferdinand Makhanu Nabiswaand Edward M. Mugalavai (2019). *International Journal of Disaster Response and Emergency Management* (pp. 51-63).

[www.irma-international.org/article/livelihoods-vulnerability-to-climate-change-among-households-in-baringo-county-kenya/240787](http://www.irma-international.org/article/livelihoods-vulnerability-to-climate-change-among-households-in-baringo-county-kenya/240787)

### Assessment of the Contribution of Crowd Sourced Data to Post-Earthquake Building Damage Detection

Reza Hassanzadehand Zorica Nedovic-Budic (2014). *International Journal of Information Systems for Crisis Response and Management* (pp. 1-37).

[www.irma-international.org/article/assessment-of-the-contribution-of-crowd-sourced-data-to-post-earthquake-building-damage-detection/114637](http://www.irma-international.org/article/assessment-of-the-contribution-of-crowd-sourced-data-to-post-earthquake-building-damage-detection/114637)

### AI and IoT Integration for Natural Disaster Management: A Comprehensive Review and Future Directions

Mariyam Ouaisa, Mariya Ouaisa, Sarah El Himerand Zakaria Boulouard (2024). *AI and IoT for Proactive Disaster Management* (pp. 1-16).

[www.irma-international.org/chapter/ai-and-iot-integration-for-natural-disaster-management/346715](http://www.irma-international.org/chapter/ai-and-iot-integration-for-natural-disaster-management/346715)

### Towards a Grid for Characterizing and Evaluating Crisis Management Serious Games: A Survey of the Current State of Art

Ibtissem Daoudi, Raoudha Chebil, Erwan Tranvouez, Wided Lejouad Chaariand Bernard Espinasse (2017). *International Journal of Information Systems for Crisis Response and Management* (pp. 76-95).

[www.irma-international.org/article/towards-a-grid-for-characterizing-and-evaluating-crisis-management-serious-games/207715](http://www.irma-international.org/article/towards-a-grid-for-characterizing-and-evaluating-crisis-management-serious-games/207715)