



## **DISRUPTION OF AID DISTRIBUTION TO FLOOD VICTIMS DURING FLOOD DISASTERS IN MALAYSIA**

**Mastura Mohd Noor**

Faculty of Business and Management  
Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor  
Malaysia  
honezblue@gmail.com

**Zarina Abdul Munir\*** 

Faculty of Business and Management  
Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor  
Malaysia  
zarin453@uitm.edu.my

**Veera Pandiyan Kaliani Sundram**

Faculty of Business and Management  
Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor  
Malaysia  
veera692@uitm.edu.my

**Norfadzilah Abdul Razak**

Faculty of Business and Management  
Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor  
Malaysia  
norfadzilah0483@uitm.edu.my

**Azmi Mat**

Faculty of Business and Management  
Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor  
Malaysia  
azmimat@uitm.edu.my

**\*Corresponding Author email: [zarin453@uitm.edu.my](mailto:zarin453@uitm.edu.my)**

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Office # 6, First Floor, A & K Plaza, Near D Watson, F-10 Markaz, Islamabad, Pakistan,

[editor@readersinsight.net](mailto:editor@readersinsight.net)

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## ABSTRACT

This study examines factors that disrupted humanitarian aid in response to the flood disaster crisis in Malaysia. These factors if not identified and addressed will hinder aid support from stakeholders at large, especially the non-governmental organizations. This paper describes the two factors to have significantly disrupted the operation, which were uncoordinated information and collaboration deficiency. Using cross-sectional survey data collected from a sample of 153 NGO members, this study performed multivariate analysis in the theoretical model to test these factors. Results indicated that collaboration deficiency is the key factor that disrupted the aid distribution process. Findings from this study proposed a sound framework to improve humanitarian aid distribution thus to improve the quality and management of humanitarian supply chain to flood victims managed by NGOs during a crisis. In addition, for practitioners, this paper can help in improving the quality and management of humanitarian supply chain to flood victims managed by NGOs during flood disasters. The novelty of this study is achieved when the study successfully identifies the impact of uncoordinated information and collaboration deficiency that makes disruption of aid distribution during flood disaster.

**Keywords:** *Disrupt of Aid Distribution; Uncoordinated Information; Collaborative; Non-Government Organization*

## RESEARCH HIGHLIGHTS

The primary impact of this study benefitted the academic and research field immensely as it described detailed findings of the factors, which had an immense affect onto humanitarian aid operations. Shedding new light onto these issues have supplemented existing data with sound knowledge and new information that will undoubtedly facilitate stakeholders including policy makers, governmental and non-governmental agencies, as well as humanitarian logistics experts. These are imperative in formulating theories, which will steer pertinent bodies to design and develop strategies for the stakeholders to follow before the next natural disaster occurs in Malaysia. Of the many positive outcomes from effective collaborations within organizations, humanitarian operations performances could improve immensely thus abetting victims that would have a ripple effect onto the community at large. Constant learning and tweaking the system to work better is not only fundamental in humanitarian supply chain management but also desirable, which undoubtedly benefits all parties. research and limitation of study

As with most studies, the design of this study is subject to limitations. First, the study focused on flood disasters as opposed to all the natural disasters that occurred in Malaysia. Future research should explore other catastrophes apart from monsoonal floods including natural calamities like epidemics, and pandemics. Second, this study did not include findings of other internal and external factors, which may have had an impact onto the humanitarian aid distribution in neighboring countries. Determining those factors in Indonesia that is prone to tsunamis and how they approach a national level crisis could be remedial, thus warrants investigation.

## Research Objectives

This paper aims to examine factors contributing to disruption of aid distribution to flood victims and to describe the uncoordinated information and collaboration issues between NGOs and governmental agencies.

## Methodology

This descriptive study examines potential factors that contribute to the disruption of humanitarian supply chain to flood disaster victims. This paper ascertains the impact of uncoordinated information and collaboration deficiency that it has on its operation. Data was collected from 200 NGOs who are actively involved in flood relief missions through convenience sampling. Findings from 153 respondents showed that more than half of the respondents were female (54.2%). As for the highest age group among the respondents were 31 – 40 years old (25.5%) followed by the age group of 41 – 45 (19%). Meanwhile, respondents in age group of 18 – 20 years old reported only 4.6%. Majority of the respondents (73.9%) were married with 22.9% single and the remaining were divorced. As for their number of year's involvement in humanitarian aid mission, half of them (51%) had worked in this area of work between 1 to 5 years, whereas 28.1% had between 6 and 10 years of experience. A mere 1.3% of them had 16 to 20 years of experience while only 1 respondent reported of having more than 31 years of experience in this line of work. To test the hypotheses, descriptive analysis and Pearson's correlation were performed.

## Results

Cronbach's alpha was performed to assess the reliability scale of the data. Based on the data analysis disrupted aid distribution, uncoordinated information and collaborative deficiency possessed high internal consistency. As suggested by George and Mallery (2012), a Cronbach's alpha coefficient greater than 0.7 is highly reliable. To support the analysis of the independent variable that affected the dependent variable, descriptive statistics were used in this study. Results revealed that the mean value for the disruption of aid distribution variable was 1.636, uncoordinated information was 1.714 and collaborative was 1.713. The standard deviation for all variables were within the range of 0 to 1 which indicated that data points are close to the mean value.

In addition, results from correlation analysis indicates that there is a relationship between uncoordinated information and collaborative deficiency towards disrupt the aid distribution. The path coefficient for uncoordinated was 0.940 explained there is positive and strong relationship towards disrupt the aid distribution. The path coefficient for collaboration deficiency was 0.830 which extrapolated that there is positive and strong relationship towards disrupt the aid distribution.

## Findings

Regression analysis is performed to predict whether an independent variable was significant or not. It also measures the strength of the relationship based on both the

independent and dependent variables (Malhotra et al., 2010). The finding of the study revealed that 88.5% of disrupt the aid distribution explained by uncoordinated information and collaboration deficiency. In addition, ANOVA analysis also exhibits that the statistical significance of the regression model tested. It shows that the regression model statistically predicts the outcome variable. Finding also indicated that uncoordinated information ( $\beta=0.026$ ,  $p>0.05$ ) did not influence the disruption of aid distribution. This could possibly be due to inaccuracy of information required during the flood disaster. Thus, it results in delays, lack of supply assistance during flood disasters. Altay and Labonte (2014), believed uncoordinated information led to significant failures in achieving the main goals of humanitarian action translated into delays, lack of resources and uncovered area.

Additionally, collaboration deficiency ( $\beta=0.919$ ,  $p<0.05$ ) was found to significantly influence the dependent variable. Most NGOs look forward to addressing the issues to improve their operation throughout a relief mission. It is necessary to ensure the factors contributing to disruption of aid distribution by NGOs to the flood victims are useful with the help NGOs to improve their service in the future. There are four key characteristics in a collaboration that will be elucidated in this paper. First, collaboration is a strategic instrument to attain organizational objectives (Imperial, 2005). Second, collaboration engages two or more independent entities and encourages sharing resources and capabilities (Woodland & Hutton, 2012). Ideally, it also should be free from hierarchical governance and influence (Provan & Kenis, 2008). Third, collaboration demands partners to make a long-term commitment rather than it being a one-off activity and (Provan & Kenis, 2008) lastly, collaboration evolves, is dynamic (Majchrzak et al., 2015), and can dissolve within an agreeable time frame (Wankhade et al., 2020). Collaboration too occurs outside of an organizational context as it can involve other entities such as networks, groups, individuals, or communities.

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### Author's Biography



**Siti Mastura Mohd Nor** holds a Degree in Business Administration Hons Human Resource Management from Universiti Teknologi MARA (UiTM). She is currently a Senior Customs Officer in Enforcement Division, Headquarters of the Royal Malaysian Customs Department. She has served for 16 years in the Department of various divisions such as Customs Division, Human Resource Management Division, Technical Services Division and Enforcement Division. She was placed in the Accounts Receivable Unit and was assigned to process the application for overpaid penalty remission appeal. She also active in various charitable activities organized by the department as well as NGOs.



**Zarina Abdul Munir** holds a Master of Business Administration and Degree in Marketing & Industrial Relation from University of Bridgeport, Connecticut, USA. She is currently a senior lecturer at the Faculty of Business Management, Universiti Teknologi MARA (UiTM). She has produced numerous articles in Human Resource Management, Management, Supply Chain and Humanitarian Supply Chain. Her works has been published in *Foundation of Management*, *Journal of Enterprise Information Management*, *International Journal of Supply Chain Management* and *Bulletin of Electrical Engineering and Informatics*. Her current research interest focus on Humanitarian Supply Chain specifically on flood disaster. She's currently pursuing her PHD in Universiti Teknologi MARA.



**Dr. Veera** is a dynamic and accomplished professional trainer and Certified Supply Chain Consultant by way of the International Purchasing and Supply Chain Management Institute [IPSCMI]. Dr. Veera received his doctorate degree in supply chain management from the University of Malaya, along with an MBA and bachelor's degree in the field of Analytical Economics. He is a Certified Purchasing Professional a chartered member of the Chartered Institute of Logistics and Transport [CILT]. He boasts over two decades of working experiences in both government and military establishments. At present he is a Professor of Operations Management and Supply Chain Logistics at Universiti Teknologi MARA.



**Dr. Norfadzilah Abdul Razak**, is a senior lecturer of Department International Business and Management Studies, Faculty of Business and Management from Universiti Teknologi MARA, Selangor. Norfadzilah's currently teaching in Business Data Analytic. Her primary research interest are in Management Studies and Organizational Behavior. Her research has been presented in several international conferences and actively apply for research grant.



**Azmi Mat**, is a Senior Lecturer at the Faculty of Business and Management, Universiti Teknologi MARA (UiTM). He received his Master of Science in Consumer Science from Universiti Putra Malaysia (UPM) in 2013 and his Bachelor's degree in Customer Service Management from Universiti Teknologi MARA (UiTM) in 2009. Azmi's research interests include sustainable consumption behavior, consumer behavior, customer complaint behavior, service quality and customer service. He is a regular reviewer for academic journals. He has published several articles in academic journals and conferences. He is also a lifetime member of the International Society for Development and Sustainability (ISDS).