



# A STUDY ON THE ROLE OF MASS MEDIA IN DISASTER MANAGEMENT IN KERALA

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## ABSTRACT

Disasters impact the economies greatly, especially in developing nations. Although, the advancement of media is evident, media involvement is hardly found in disaster situations in India. This thesis is an attempt to find ways to involve media into disaster management in India. In order to identify possible ways to establish more profound role of media in disaster management, author has conducted situational analysis to learn how media has performed so far in large scale disasters in India, conducted surveys for gaining better insights into knowledge level of general population and interviewed experts for understanding why and how of media interventions in disaster management in the country. Interestingly, media's mention cannot be ruled out from existing policies and frameworks, and it has been there ever since the formation of Disaster Management Act. It is noticed that media's presence has increased from the time of tsunami in 2004 (where only reporting of events was taken care of by media), to Uttarakhand Flash Floods 2013 (media played an informative role during disaster phase), to Tamil Nadu floods in 2015 (various types of media was used for locating victims and reaching out to them). However, all three are examples of media usage during response phase. Looking at countries like Japan, it is found that media is working more effectively in propagating preventive measures in addition to being a partner in response mechanism. Disaster management in India requires to build a roadmap for capacity building. This document provides a sustainable model for better government media and public partnerships that can be adapted according to crisis for its better management. It is solemnly hoped that this research will be of pronounced use for future, though revisions, updating and upgrading is a continued process.

## INTRODUCTION

Disasters are unforeseen event that is responsible for sudden disruption of normal life on a larger scale. This disruption could be the effect of environmental or non-environmental malfunctioning leading to greater losses of life and property. According to National Institute of Disaster Management disaster is defined as “an event of nature or man-made that leads to sudden disruption of normal life of a society, causing damage to life and property to such an extent that normal social and economic values available are inadequate to restore normalcy after a disaster” National Institute of Disaster Management (2005).

While it has been realized worldwide that, media is a key stakeholder in disaster reduction, it still lacks to get initialized in India. Taking examples from 11 countries like Japan, as it is one of greatest disaster prone countries, it has always met all priorities set by various frameworks in the past. Interestingly, one can notice that Japan’s disaster management mechanism is developed in a way that all the major stakeholders are equally involved in disaster management. It can also be realized that media is provided a role in each phase of disaster management in Japan’s Framework for disaster reduction. A white paper released by Cabinet Office of Japan on Disaster Management in 2015 provided its detailed media plan, which suggests media’s role and necessary involvement for working towards Disaster Risk Reduction (DRR). Having said that a good level of awareness among vulnerable communities is crucial. This is where the need of mass media increases even more. However, it would be wrong to deny the fact that media’s importance is always recognized in Indian disaster management scenes.

## STATEMENT OF THE PROBLEM

Media’s role has neither been tapped nor crystallized in mitigating as well as reconstruction after the impact of disaster. There is a lot of potentiality of media’s involvement in the disaster management which will be more effective than any other medium. Potentiality of media is examined and measured through this research. Huge amount spent in dissemination of knowledge of disasters has not been very cost effective and media’s role in this regard will be an effective way to channelize resources in the correct direction without economic wastage. Before we proceed to reviewing the available literature for this study, it is significant to learn the operational definition of the terms Media, Disaster Management, Disaster in this context.

## RESEARCH QUESTIONS

- 1) What is the role of mass media in disaster management cycle - in prevention, mitigation, rescue and redevelopment in Kerala?

- 2) What are the existing communication strategies (if any) that are being implemented in disaster management in Kerala?
- 3) How mass media could be used in a comprehensive manner, which can lead India towards disaster resilience?

## OBJECTIVES

1. To examine the role of media in disaster management.
2. Investigate relationship between demographic variables and awareness about disaster management.

## REVIEW OF LITERATURE

**Pal, Ghosh, & Ghosh (2017)** examined the effectiveness of Indian disaster management policies in achieving its intended outcomes of mitigation and response thereby minimizing causalities and losses caused to the community (India) by cyclone Phailin in 2013. This study also focused on how media played a key role during this situation. The emphasized role of media in cyclone Phailin indicates that with the use of various media, it was made possible to transmit early warning messages in timely manner.

According to **Nair, Role of Media in Disaster Management (2010)**, in order to learn the significance of mass media and disaster mitigation and control, it is significant to distinguish communication situation along three dimensions – stage, audience and level of effect it has on individual and collectively. While highlighting the need of mass media in disaster management, he identifies the gaps that lay between media professionals and disaster managers.

**Bosher, Dainty, Carrillo, Glass, & Price (2009)** insists upon proactively working upon strategic weaknesses can be helpful in protecting the built environment from a prevailing hazards. The study focuses on understanding the extent of problem, focusing on those issues and their extent, develop and modify the regulations and legislations relating to such issues and lastly, finding out key stakeholders should be and at what point they should provide their key interest. This kind of multi-level systematic approach to vulnerabilities would particularly ensure its timely success and that will greatly help in dealing with vulnerabilities. Analogous effort is required in terms of addressing floods hazards in India too. Analogous effort is required in terms of addressing floods hazards in India too.

## RESEARCH METHODOLOGY

### RESEARCH DESIGN

This study follows the path of exploratory and descriptive research design as the main goal of the researcher is to get an in depth knowledge of media's role in disaster prevention, mitigation, and relief and then to identify

suitable ways to increase media intervention in disaster management. The researcher has used situational analysis to explore existing media role and its functioning in disaster management.

## AIM OF THE STUDY

To examine the efficacy of role of Media in disaster prevention, mitigation, and relief on the one hand and to increase media's interventions in disaster management for reducing the gaps that exist between authorities and general public on the other

## SAMPLING

It is the process of drawing a group of identified individual respondents for the study in such a way that the individuals represent a larger population from which they would be selected.

## SAMPLING TECHNIQUES

This study will be used the Random Sampling

## RESEARCH TOOL

The questions are arranged in logical sequence. The questionnaire consists of a variety of questions presented for the response. Dichotomous questions, multiple choice questions, rating scale questions were used in constructing questionnaire.

## SAMPLE OF THE STUDY

The population of the present study consisted of the general public in Thiruvananthapuram district. In this study the total sample size is only 120.

## DATA COLLECTION

### Primary data

The primary data will be collected from the respondents by administering a structured questionnaire and also through observation, interview & discussion with general public in Thiruvananthapuram.

### Secondary data

Apart from primary data secondary data will be collected through text books, the records and journals from various sources.

## STATISTICAL TECHNIQUES APPLIED

- Regression
- Chi-square test

## DATA ANALYSIS

H1: Not every respondent would agree that they have enough awareness about potential disaster.

**Table No.1**

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852 <sup>a</sup>	.726	.723	.61573

a. Predictors: (Constant), potential disaster.

The Multiple R for the relationship between the set of independent variables (Awareness) and the dependent (potential disaster) variable is 0.852, which would be characterized as very strong. The R coefficient indicates that the predictors of the model (potential disaster) which has a correlation of 85.2% with the dependent variable of employee performance. It means there is a strong relationship between enough awareness about potential disaster.

**Table No.2**

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.373	1	118.373	312.223	.000 <sup>b</sup>
	Residual	44.737	118	.379		
	Total	163.110	119			

a. Dependent Variable: potential disaster  
b. Predictors: (Constant), Awareness

The table of ANOVA shows that variations in the awareness can be explained by the model to the extent of (72.57%) 118.373 out of 163.110. The F value of the model produces a p-value of 0.000. A p-value of 0.000 is lower than the set level of significance of 0.05 for a normally distributed data. This means that the model is significant in explaining respondents awareness.

**Table No.3**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	.296	.178		1.661	.099
	Awareness	.930	.053	.852	17.670	.000

a. Dependent Variable: potential disaster

The result shows that for the independent variable potential disaster practice, the probability of the t statistic (0.000) which is lower than the level of significance of 0.05. We reject the null hypothesis and summarize that there is significant relationship between awareness about potential disaster.

H2: There is no significance difference between the demographic variables of the respondent and the awareness about disasters

**Chi – square Test**  
**Table No.4**

	N	Chi-value	P-value	Significant value
Gender * awareness about disasters	186	92.299	.501	0.05
Age * awareness about disasters	186	379.959	.377	0.05
Education* awareness about disasters	186	86.530	.669	0.05
Income* awareness about disasters	186	94.084	.449	0.05
Residence* awareness about disasters	186	174.839	.711	0.05

Table 2 shows the chi square analysis of the demographic variables and opinion about knowledge management practice.

Chi square analysis of the gender and employee clears that the p (0.501) value is more than the alpha value ( $P>0.05$ ). As the p value is more than the alpha value, the null hypothesis is accepted. It indicates that there is no significant difference between gender and opinion about awareness about disasters

The value of Pearson Chi-Square is 92.299.

Chi square analysis of the age and awareness about disaster clears that the p (0.377) value is more than the alpha value ( $P>0.05$ ). As the p value is more than the alpha value, the null hypothesis is accepted. It indicates

that there is no significant difference between age and opinion about awareness about disasters. The value of Pearson Chi-Square is 379.959.

Chi square analysis of the education and respondents clears that the p (0.669) value is more than the alpha value ( $P>0.05$ ). As the p value is more than the alpha value, the null hypothesis is accepted. It indicates that there is no significant difference between education and opinion about awareness about disasters. The value of Pearson Chi-Square is 86.530.

Chi square analysis of the Income and awareness about the disasters that the p (0.449) value is more than the alpha value ( $P>0.05$ ). As the p value is more than the alpha value, the null hypothesis is accepted. It indicates that there is no significant difference between income level and opinion about the awareness about disasters. The value of Pearson Chi-Square is 94.084.

Chi square analysis of the residence and awareness about disasters clears that the p (0.711) value is more than the alpha value ( $P>0.05$ ). As the p value is more than the alpha value, the null hypothesis is accepted. It indicates that there is no significant difference between experience and opinion about awareness about disasters. The value of Pearson Chi-Square is 174.839.

## RECOMMENDATION

Highlighting the gaps that exists in the disaster management plan in Kerala, the researcher strongly feels that media campaigns in accordance with vulnerable communities would help with three major developments,

- 1) Increased participation
- 2) Awareness generation regarding hazards and
- 3) Most significantly, preparedness of communities

India has hazard zonation map, however, need to map out vulnerable communities is tedious but significant task. With vast diversity in India, the need differs from place to place. It is important to conduct extensive research on similar line to know

- 1) Necessities of different communities,
- 2) To plan what type of mass communication practices would work in these regions
- 3) Design and propagate such processes that are best suited for community preparedness and resourcefulness.

## CONCLUSION

Disaster preparedness has been recognized as one of the significant gaps in disaster management since 2005, at the World Conference on Disaster Risk Reduction (DRR) in Kobe, Japan. While preparedness is one of the

prime responsibility in developed nations, in developing countries like India preparedness has not received as much attention like response and recovery. Preparedness is a progression from response mechanism that focuses on enduring capacity building aiming smaller areas. In other words, it could be defined as a step taken towards organizing groups to handle catastrophes in a way that they are ready physically and mentally to take quick actions during a calamity. Media's role has recognized to be that of a leader in information dissemination in case of disasters about warnings and dos and don'ts during a looming disaster. However, media's role in disaster management, especially in preparedness needs to be chalked out. This study proposes that all type media can be used considerably in preparedness phase by means of educative content Media's primary task is to influence and in this case it is capable of enhancing awareness generation and long term preparedness for disaster situations. This study examined media's role, particularly in two entirely different geographical regions which are prone to similar disasters, in turn learning media's essential contributions to awareness generation for disaster preparedness.

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