



A PROSPECTIVE OF KNOWLEDGE, ATTITUDE AND PRACTICES (KAP) STUDY ON DISASTER PREPAREDNESS IN BAGAHA-II BLOCK OF WEST CHAMPARAN DISTRICT, BIHAR, INDIA

Arshad Umar* Brig (Dr) Bhagat K Khanna Professor Amarjeet Kaur***
Dr. Priyanka Kumari,******

** CB DRR Practitioner, MBA (Disaster Management) Guru Gobind Singh Indraprastha University, India.*

***SM, VSM, CEO ARISE INDIA and Former Founder Advisor in National Disaster Management Authority, Govt of India.*

****Director, CEDM, Guru Gobind Singh Indraprastha University, India*

***** Course Coordinator, CEDM, Guru Gobind Singh Indraprastha University, India*

Abstracts

Community engagement is the most effective factor in achieving sustainability in dealing with disaster risk reduction and preparedness. A study was carried out to analyze the knowledge, attitudes and practices of communities living in remote rural areas, towards disasters. Residents of the Gandak river basin in the Sidhawa (Bagaha-II) Block of the West Champaran District, State of Bihar, India, were chosen for the research. Focused group discussion and research using a simple random selection approach was adopted in the study. A pre-defined questionnaire was formulated and used for both the knowledge and skills survey and the focus group discussions. The research found out that many a respondents had knowledge about various types of hazards in their area, such as heat waves, floods, drought, earthquakes, pandemic, and other hazards, but their behavior and attitude knowledge, how to mitigate them and prepare for the perceived disasters was low though they had positive attitude for the same. Practice is however a crucial part of behavioral change. As a result, around 50% respondents did not practice disaster preparedness related activities sincerely, but 98% respondents had experienced more than one disaster and 62% respondents had participated in training programs on disaster risk reduction. It could thus be deduced that only disaster preparedness training and mock drills are not sufficient for reduction in disaster risks. Social and Behavior Change Communication (SBCC) training is equally important and is highly recommended along with disaster risk reduction training programs, because communication surely overcomes barriers to normative and social changes.

Keywords: Disaster, Preparedness, Knowledge, Attitude, and Practice.

Introduction

A disaster is a significant event that causes extensive human, physical, economic or environmental losses and has impact on individual and communities. The concept of disaster preparedness encompasses measures aimed at enhancing life safety when a disaster occurs, such as protective actions during an earthquake, hazardous materials spill, or terrorist attack. ^[1] Bagaha-II block is highly vulnerable to annual floods in the Gandak River, has high risk of earthquakes (Zone IV) ^[2], medium risk of epidemics, road accidents & urban fires and low risk of wind storms. Disaster preparedness is a set of actions taken in advance by governments, organizations, communities or individuals to better respond to and cope with the immediate consequences of a disaster, whether man-made or natural disaster.^[3] "Preparing for disasters saves countless lives, speeds up people's recovery and saves money."^[4] The research study was conducted in the Bagaha-II block on disaster preparedness, their knowledge, attitude and practice for the same, so as to enable them to achieve a better quality of life. The study came out



with gaps drawn from the lessons learnt and also builds the way forward for further studies, and work required for the same at grassroots level.

Methods

Study area

The study was conducted in the Bagaha-II Block lying along Gandak river basin, of West Champaran district, Bihar State, India. Bagaha-II block is hemmed in by the river in the West and by a forest sanctuary (the Valmiki Tiger Reserve) in the East.

Study Design

A quantitative survey study design was used.



Map-1: Sidhaw (Bagaha-II) Block of West Champaran district [5]

Data Collection Instruments & Technique

Randomly resident of Bagaha-II Block were selected, who fulfilled the inclusive criteria. Data collection questionnaire was created, respondents were approached individually and data entry was conducted immediately after Focus Group Discussion (FGD), physical-telephonic interview (survey). Total 402 people were contacted and 385 individuals (227 male & 158 female) participated ultimately in the survey.

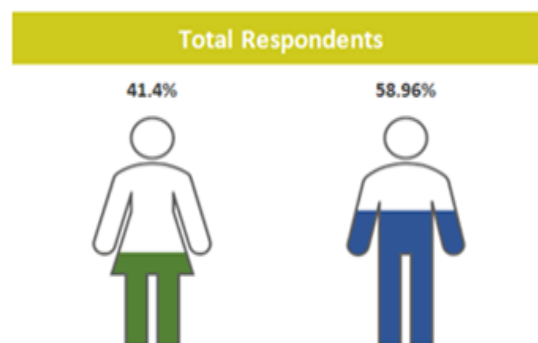


Figure 1: Percentage of total respondents

Results

Information on Respondents' General Characteristics and Socio-Demographics

The socio-demographic and general information of the respondents' primary age range was 40–45 years, followed by 45–50 years, with 29.87%, and 24.16%, respectively. Male respondents made up 58.96% of the sample, while female respondents were 41.04%. The majority of respondents (72.47%) worked as



farmers or farm laborers. 43.90% family members had completed grades up to class five and 18% respondents had seen or experienced more than one catastrophe and just 1.82% had never seen or experienced more than one disaster.

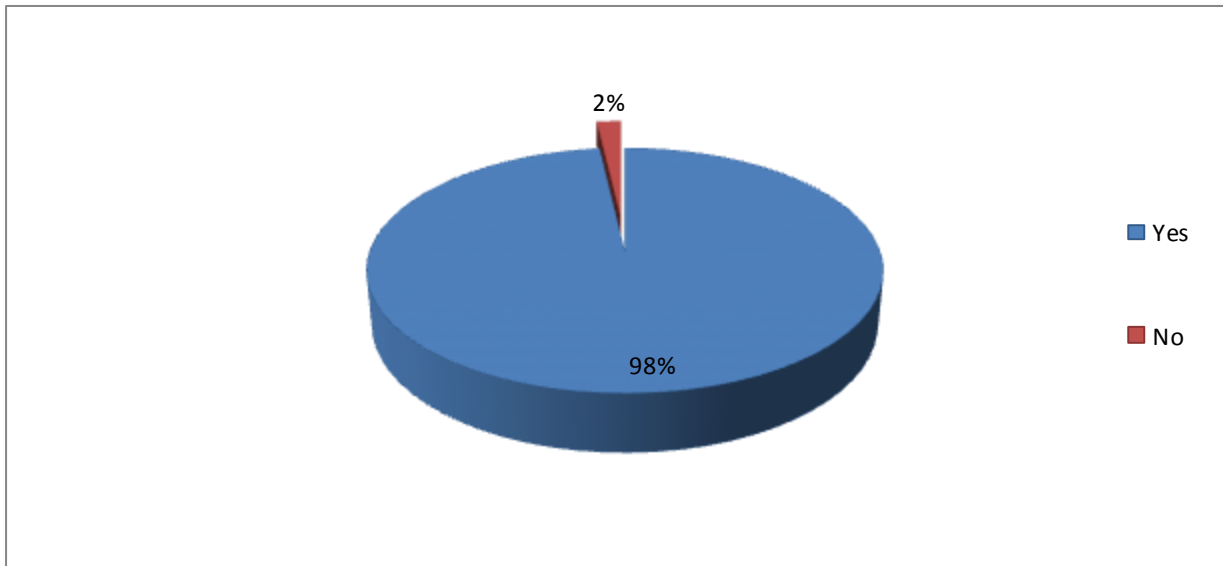


Figure 1: Respondents have seen/experienced more than one disaster.

Knowledge about Disaster Preparedness

38.44% respondents had not participated in any training related to disaster risk reduction and disaster prevention; 57.40% were aware of the existence of a community disaster management plan; 42.60% were unaware of any disaster plan and 30.65% respondents were unaware that flooding was the area's biggest problem. 94.55% respondents knew there was a community-based flood early warning system that provided early warning information and 87.27% respondents had information about safe places nearby.

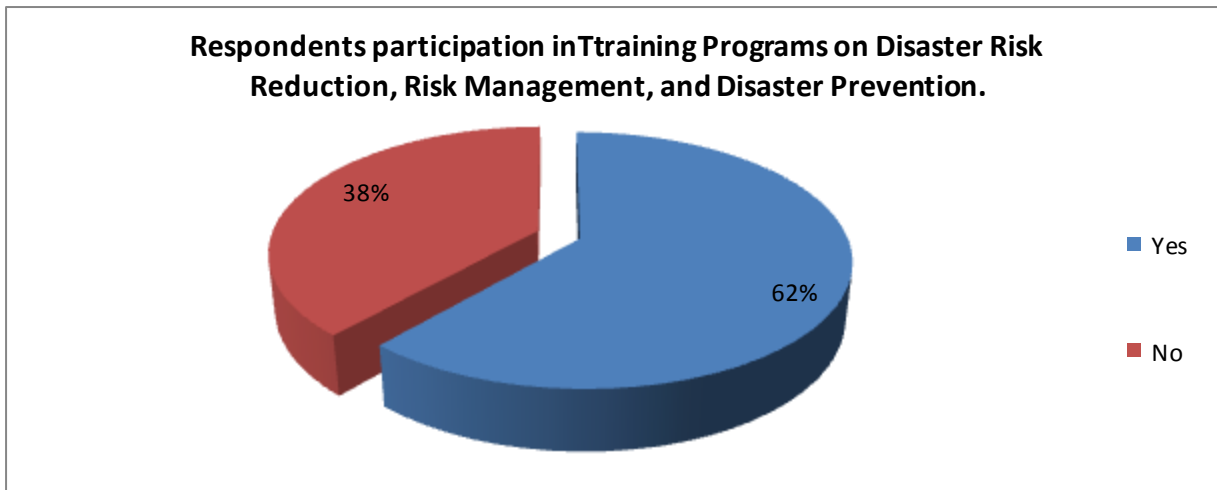


Figure 2: Respondents participated in training programs on disaster risk reduction, risk management, and disaster prevention.



Attitude about Disaster Preparedness

82.86% respondents agreed that floods and earthquakes were biggest hazards in their area. 91.43% respondents expressed the need to know about disaster plans; 90.39% respondents agreed to update disaster management plans occasionally and 92.99% respondents had a positive attitude about community kitchen, to be organized during disasters/emergencies and most of the respondents agreed that they should set up reception centers during disasters.

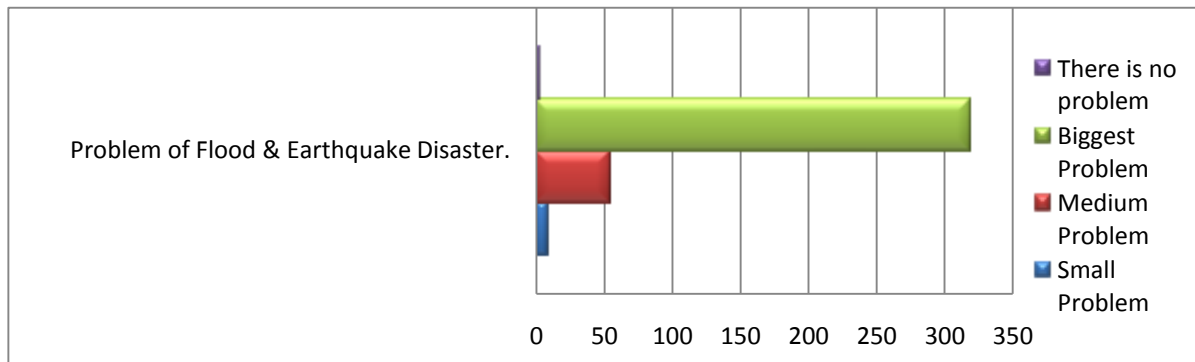


Figure 3: Problem of Flood and Earthquake Disaster

Practice of about Disaster Preparedness

66.49% respondents stated that mock drill exercises had been held in the community a long time ago; 67.27% had not made any Family Disaster Management Plan; 54.29% respondents had taken part in a mock drills organized at the village level; 42.08% respondents had not shared information about disaster survival with their families, friends and relatives and 95.58% of respondents had run out of the house immediately, whenever an earthquake occurred.

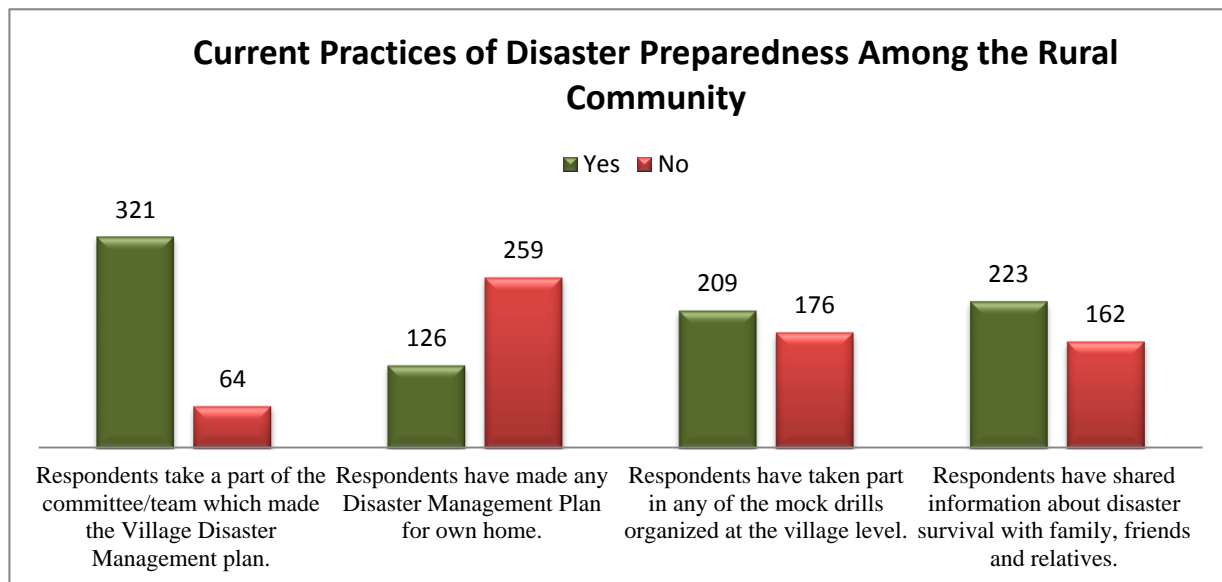


Figure 4: Current practices of Disaster Preparedness among Communities People

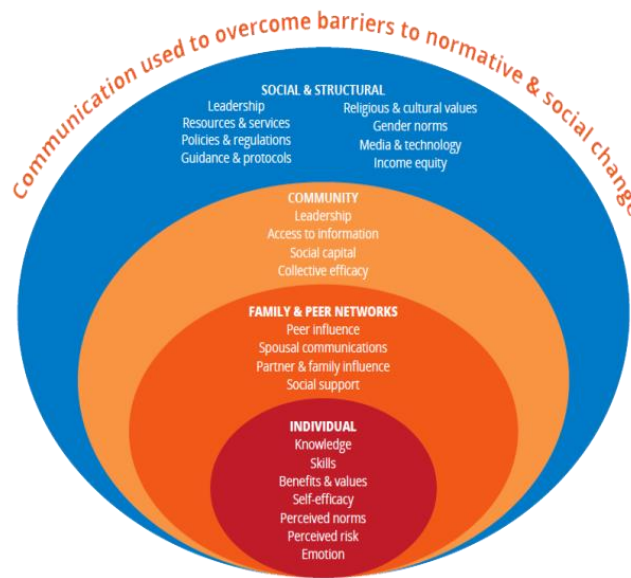


Results of FGD

A total of three focus group discussions were conducted in this study. In these focus groups, participants include opinion leaders, activists, members of self-help groups, village disaster management committees, and members of PRI. Majority of the participants were found to be aware about the disaster preparedness, they have participated disaster risk reduction related training, meetings and mock drills. The respondents have positive attitude towards disaster preparedness and disaster risk reduction training knowledge. However, all participants did not practice as per their knowledge of disaster preparedness and response.

Conclusion/Recommendations

As per above focus group discussion and survey results, it can be seen that the results obtained above show general similarities in terms of the responses collected through the interview schedule. This provides a solid and legitimate basis for the data or information collected from respondents. 98% respondents had experienced more than one disaster; 62% respondents had participated in training programs on disaster risk reduction, risk management and disaster prevention; 83% respondents had considered that floods and earthquake disaster were the biggest problem for their community. In spite of this knowledge, around 50% respondents still did not practice disaster preparedness related activities. Therefore, SBCC training along disaster risk reduction and risk management training programs are highly recommend, because communication is considered to overcome barriers to normative and social changes. There is thus a need to do further research and investigate the component on the topic of SBCC along with disaster preparedness. Activities of Social Ecological Model help for SBCC is influenced by many factors at the individual, family, peer networks, community and beyond levels. The level of influence can be summarized by the Socio-Ecological Model, shown below (Model-1).



Model 1: The Social Ecological Model [6]



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