Involvement of Local Community in Disaster Management: A Case Study in Mara Region, Tanzania

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ABSTRACT
Disasters are frequent occurrences that might strike out of nowhere at any time with disastrous results. Because disasters occur often across the world, communities need to take precautions against risks that might disrupt or interfere with their regular operations. Using Tanzania's Mara area as an illustration. The purpose of the study was to look into the local community's involvement in crisis management. The study sought to identify the most likely categories of disasters, the degree of community involvement in disaster management, the community's readiness for disaster management, and the community's obstacles in disaster management. Whereby convenience and purposive sampling technique was used and 112 sample size was used in the study.

Keywords: Tanzania, Mara Region, Community, Disaster Management

Abbreviations.
MoHA - Ministry of Home Affairs
VEO - Village Executive Officer
NDMS - National Disaster Management Strategy
NGO – Non - Governmental Organization
TMA – Tanzania Metrological Agency
MEO – Mtaa Executive Officer
1. INTRODUCTIONS

Communities are essential because they being the first to react in times of disaster. Several international studies have highlighted the importance of empowering disaster-affected communities and provided illuminating details regarding the importance of communities even in circumstances in which they may lack power or influence (Rowlands, 2013; Slotterback, 2013). According to Rowlands (2013), neighborhood-level community involvement and collaboration will provide the community authority over the revamping preparation. This entails addressing the intelligence of the community, securing local providers for goods and services (including social work and brain research), and enlisting members of the community as experts to revitalize their community. This strategy ensures the use of large-scale disaster recovery initiatives within the social and societal sectors of typical calamities. This paper examines how local communities in Tanzania's Mara Region are involved in disaster management. Society's ideas and understanding are invaluable in shaping the recovery process and enabling policymaking involving supervision and other interventions.

2. STATEMENT OF THE PROBLEM

A major problem in disaster management is that there are no explicit rules that the neighborhood may adhere to in case of a disaster. Information about what to do, where to take shelter, and the locations of the scheduled assembly places is lacking. Notably, the primary obstacle in disaster management frequently lies not in the absence of technology or pertinent data, but rather in the inability to obtain timely and precise information. Therefore, the availability of trustworthy information is crucial to disaster management.

3. AIMS

The study aimed to examine involvement of the local community in disaster management: A case study in Mara Region, Tanzania

4. OBJECTIVES

The objective of the study includes the following

i. To ascertain the kinds of calamities that are most likely to strike the Mara Region.
ii. To evaluate the Mara region's level of readiness for disaster management

iii. To assess the degree of community participation in disaster relief
iv. To determine the current obstacles preventing the community from effectively participating in disaster management.
5. SIGNIFICANCE OF THE STUDY

The study's significance is to provide insightful statistics that can be used to avoid, alleviate, and plan for tragedy management strategies in both national and local contexts. It aims to respond to questions about the effectiveness of community-based disaster management initiatives. The study's conclusions may influence the creation of policies and programs for disaster management that are suited to the requirements of the local population. Additionally, the study is significant because it may be used as a local instructional tool to emphasize the value of disaster planning and response in maintaining service delivery during emergencies. Information scientists and public sector officials are expected to benefit from the results, which provide important data for policy formulation.

6. LITERATURE REVIEW.

A crucial phase in the research process is the review of the literature. A review of literature is a thorough, methodical, and detailed analysis of publications pertinent to the research process. One of the best things about the literature and review is how much it adds to our understanding of the field and the scholarship of research. It is an extensive, thorough, systematic, and critical assessment of academic publications, unpublished academic print materials, audiovisual resources, and private correspondence.

- Literature related to the study

Disaster management refers to the process of preparing for, mitigating the impact of, responding to, and recovering from natural or man-made disasters. It involves a range of activities including risk assessment, emergency planning, coordination of resources, communication, and community engagement.

**NDMS (2022)**, the National Disaster Management Strategy tried to show how Tanzania is managing disasters and the organizations involved. Tanzania’s Prime Minister's Office is in charge of planning and responding to emergencies. When disasters strike, this ministry must provide prompt responses in coordination with partners and stakeholders. The National Steering Committee for Disaster Management also the National Technical Committee for Disaster Management, the National Stakeholders Platform for Disaster Management, Regional Technical Committees for Disaster Management, District Steering Committees for Disaster Management, City, Municipal, Town, and District Technical Committees for Disaster Management, Ward Committees for Disaster Management, Village or Mtaa Committees for Disaster Management, Ministries and sectors, TMA, and other non-governmental organizations (NGOs) are some of the entities involved in the coordination of response activities in Tanzania.

**Mathews & Eden (2005:30)** highlight the significance of training people to raise awareness of common safety and security issues. This will enable them to take preventative action to lessen the likelihood of disasters and equip themselves with the knowledge they need to respond appropriately in the event of one. All community members should get training so that everyone is aware of their duties and responsibilities and is ready for any event, including floods and fires. People who have received disaster planning training would be aware of any threats and quickly alert the appropriate authorities before they worsen and become significant disasters.
Coppolla et al. (2008:80), insurance can act as a mechanism for risk reduction since it transfers risk from people or communities to insurance corporations. Following the Kentucky Medical Association Insurance Model, people must ensure they have enough to cover losses in the case of a particular disaster. Evaluating whether insurance plans give enough money to support company recovery and replacement value for lost assets is critical. It is crucial to keep thorough records of insurance policies, which should include information on the agent's contact details, the kind and number of the policy, the deductible, the limits, and the coverage.

MoHA (2012) report on road safety, claimed that millions of people are injured and more than one million people die in traffic accidents globally each year. Even though these nations only account for 48% of all registered automobiles worldwide, over nine percent of these deaths take place in low- and middle-income nations. In India, the problem of road safety is very serious. About 4.8 lakh traffic accidents occurred in 2008 alone, with about 1.2 lakh fatalities and 5.2 lakh injuries—many of which cause permanent disabilities—resulting. Unfortunately, a sizable fraction of these casualties are young, working adults.

7. METHODOLOGY
The methodical procedure that researchers employ to gather, examine, and evaluate data to find answers to research questions or validate hypotheses. It covers the general methodology and methods used in a research project, assisting the investigator at different phases from ideation to completion.

- **Study Area.**
The study was conducted in two districts namely Rorya district and Musoma rural in Mara Region- Tanzania, and the study population was: Local community leaders, VEO/MEO, Non-governmental organizations, health professionals, and residents made up the study population.

- **Sample Size**
The number of people chosen at random from the population to serve as a sample is known as the sample size (Kothari, 2004). Because of the moderate sample size and the resulting data saturation, the data analysis process was simple. 73 community members, 6 non-governmental organizations, 13 VEO/MEOs, 13 local community leaders, and 7 health professionals made up the sample of this study. This resulted in a sample of 112 participants, which was enough given the study's objectives.

- **Sample Technique**
Non-probabilistic sampling was used in this investigation. The researcher had considerable opportunity to select a set of samples he was interested in examining thanks to the non-probabilistic sampling approach. The sample selection process is made simpler, less expensive, and takes less time thanks to this non-probabilistic technique (Dhivyadeepa, 2015). Purposive and convenience sampling techniques were two of the non-probabilistic sample methods used in this investigation.
Purposive Sampling: used for local community leaders, VEO/MEO, health professionals, NGOs, and community members. Local community, VEO/MEO, health professionals, and community members were involved in the study through the use of purposive sampling because the researcher considered the characteristics of the respondents on the required information.

Convenience sampling, also known as availability sampling, is a specific type of non-probability sampling approach that gathers data from members of the community who are able and willing to participate in the research. Convenience sampling was used since the researcher sent a link to the online survey to every person on your mobile phone's contact list. The investigator discovered that this method was the most efficient and useful way to identify the primary data sources for the investigation.

- Data Analysis
To determine the precise meaning and interpretation of the data gathered, the researcher performed a quantitative analysis of the data. The Mara region's available disaster management practices, local leaders' involvement in disaster management, methods for involving the community in disaster management, obstacles to disaster management practices, and solutions were the basis for the data analysis. Charts and figures were used for the collected data because the study was limited to quantitative data. Initially, the data from the questionnaire was transcribed. Next, themes that agreed or disagreed with the study and the body of existing literature were found, evaluated, and reported.

8. FINDINGS AND ANALYSIS

Table 1: Demographic information of the respondents.

<table>
<thead>
<tr>
<th>S/n</th>
<th>GROUP</th>
<th>FREQUENCY(f) N=112</th>
<th>PERCENTAGE %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Under 25 years Old</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>26- 35 years old</td>
<td>58</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>36- 45 years old</td>
<td>35</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>46 – 50 years old</td>
<td>10</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>Over 50 years old</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>73</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>39</td>
<td>35%</td>
</tr>
</tbody>
</table>
Table 2: Kinds of calamities that are most likely to strike the Mara Region.

<table>
<thead>
<tr>
<th>Disasters likely to occur</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquakes</td>
<td>19</td>
<td>9%</td>
</tr>
<tr>
<td>Floods</td>
<td>48</td>
<td>22%</td>
</tr>
<tr>
<td>Droughts</td>
<td>43</td>
<td>19%</td>
</tr>
<tr>
<td>Cyclones/Storms</td>
<td>13</td>
<td>6%</td>
</tr>
<tr>
<td>Landslides</td>
<td>11</td>
<td>5%</td>
</tr>
<tr>
<td>Fire</td>
<td>25</td>
<td>11%</td>
</tr>
<tr>
<td>Epidemics/Disease Outbreaks</td>
<td>46</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>8%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>223</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Table 3: Indication of community participation in disaster management

<table>
<thead>
<tr>
<th>Indication of Participation</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting drills or simulations</td>
<td>12</td>
<td>7.3%</td>
</tr>
<tr>
<td>Creating emergency plans</td>
<td>42</td>
<td>26%</td>
</tr>
<tr>
<td>Establishing community emergency funds</td>
<td>30</td>
<td>18.3%</td>
</tr>
<tr>
<td>Stockpiling emergency supplies</td>
<td>10</td>
<td>6.1%</td>
</tr>
<tr>
<td>Participating in early warning systems</td>
<td>44</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>15.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>163</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4: Obstacles preventing the community from effectively participating in disaster management.

<table>
<thead>
<tr>
<th>Barrier for participation</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of awareness and education</td>
<td>94</td>
<td>33%</td>
</tr>
<tr>
<td>Limited financial resources</td>
<td>76</td>
<td>26%</td>
</tr>
<tr>
<td>Socio-cultural norms and practices</td>
<td>50</td>
<td>17%</td>
</tr>
<tr>
<td>Weak institutional support</td>
<td>46</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>288</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

9. DISCUSSION AND SUMMARIES

The research's objective was to investigate how the local population participates in disaster management using a case study of Tanzania's Mara area. The study found that the region is regularly disturbed by calamities such as fires, floods, droughts, and disease outbreaks. The study discovered that low community involvement in disaster management in the Mara region of Tanzania, specifically in Musoma rural and Rorya, is caused by a lack of knowledge and training on disaster management, weak institutional support for weak disaster management committees, and limited funding allocation for disaster relief. Finally, the study discovered that while disaster management governance is generally only moderately successful, the lack of regional disaster management plans has a detrimental impact on the Mara region's disaster management methods, especially in the study area of Musoma rural and Rorya.
10. RECOMMENDATION

- **Training and capacity building**
  Raising public awareness should be a regular task, and community and other people's training should be prioritized—even if it involves contacting members of the fire or disaster departments. Additionally, determine the community’s issues with disaster management by making sure the issues are resolved. Set aside enough money to oversee the management and mitigation of disaster.

- **Preparation of disaster management plan**
  A thorough risk assessment is part of creating a disaster management strategy. This entails determining whether possible dangers—such as earthquakes, floods, wildfires, or industrial mishaps—are common in the region. Authorities can better plan for the effects of these risks and develop effective response measures if they have a better grasp of their nature and probability.

- **Active disaster management committees at all levels**
  Effective disaster preparedness and response depend critically on the establishment of dynamic disaster management committees at all governmental levels. These committees act as hubs for pre-, during-, and post-disaster coordination, cooperation, and decision-making. Local representatives of government agencies, emergency services, community organizations, and grassroots stakeholders are gathered in community-based disaster management committees. They carry out risk assessments, assist in the creation of regional disaster plans, and organize response operations that are customized to meet the unique requirements of their communities. Similarly, disaster management committees at the regional and national levels assign resources, oversee policy conformity, and support subordinate levels of government. These committees are vital to the development of multi-sectorial collaborations and a society-wide approach to catastrophe management.

REFERENCES


