

## ASSESSING THE EFFECTIVENESS OF EMERGENCY RESPONSE PLANS IN LOCAL GOVERNMENT AREAS (LGAS) IN NASARAWA STATE, NIGERIA

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### ABSTRACT

Emergency response plans (ERPs) are essential frameworks that guide disaster preparedness, response, and recovery efforts. In Nigeria, Local Government Areas (LGAs) play a crucial role in emergency management; however, they often face significant challenges, including inadequate preparedness, poor coordination, and insufficient community engagement. This study assesses the effectiveness of ERPs in Nasarawa State, Nigeria, focusing on preparedness levels, resource allocation, and community involvement. A descriptive cross-sectional study was conducted among 384 respondents, including government officials, emergency response personnel, health workers, and community leaders. A structured questionnaire was used to collect data on ERP effectiveness, training programs, resource availability, and community participation. Descriptive and inferential statistics were performed using SPSS, including chi-square tests, logistic regression, and ANOVA, with a significance level of  $p < 0.05$ . The findings indicate that only 50% of respondents agreed that their LGA had a documented emergency response plan, while 60% reported inadequate preparedness training. Functional early warning systems were available in only 40% of LGAs, and 60% of respondents disagreed that regular emergency simulations and drills were conducted. Additionally, 55% reported weak inter-agency coordination, and 70% stated that LGAs lacked dedicated emergency response funding. Community engagement was also low, with 60% of respondents disagreeing that residents were involved in emergency planning, and 55% indicating that volunteer training was insufficient. The study reveals that ERPs in Nasarawa State are moderately effective but have significant weaknesses in preparedness,

coordination, and community participation. Poor training, lack of resources, and limited community involvement undermine emergency response efficiency. Addressing these challenges requires better inter-agency coordination, increased government funding, regular training programs, and improved community engagement to enhance disaster resilience at the local level.

**KEYWORDS:** Emergency Response Plans, Preparedness, Disaster Management, Local Government, Resource Allocation, Community Engagement, Nigeria.

## I. INTRODUCTION

### 1.1 Background

Emergency response plans (ERPs) are essential frameworks that guide preparedness, response, and recovery efforts during disasters and crises. Effective ERPs help mitigate casualties, reduce economic losses, and ensure a coordinated response among government agencies, humanitarian organizations, and affected communities (WHO, 2021). Globally, countries have developed various emergency preparedness strategies, including early warning systems, disaster risk reduction programs, and response coordination mechanisms. However, the effectiveness of these plans varies based on resource availability, institutional capacity, and community involvement (UNDRR, 2020).

In Nigeria, disaster management is primarily coordinated by the National Emergency Management Agency (NEMA) and State Emergency Management Agencies (SEMAs). These agencies are responsible for developing and implementing ERPs at different levels of government. However, at the local government level, emergency response is often constrained by inadequate resources, lack of trained personnel, and weak inter-agency coordination (Adepoju, 2020). Nasarawa State, like many other states in Nigeria, is highly vulnerable to disasters such as flooding, disease outbreaks, communal conflicts, and road traffic accidents. These emergencies require well-structured response mechanisms to minimize their impact and facilitate timely interventions (Adeleke, 2020).

One of the fundamental components of an effective ERP is preparedness, which involves training emergency responders, equipping health facilities, pre-positioning relief supplies, and establishing functional early warning systems. However, studies indicate that most LGAs in Nigeria have low levels of disaster preparedness due to insufficient funding and weak institutional frameworks (Olawale & Musa, 2019). Additionally, resource allocation and coordination play a crucial role in emergency response efficiency. Effective ERPs require

adequate financial, logistical, and human resources to support timely interventions. Unfortunately, many LGAs face significant resource constraints, leading to delayed and ineffective response efforts (Obi & Eze, 2021).

Another critical factor in ERP effectiveness is community engagement. Community participation enhances disaster preparedness by fostering awareness, promoting local risk assessments, and encouraging volunteerism in emergency response activities. However, in many Nigerian LGAs, community members are often excluded from disaster planning, leading to low awareness and inadequate preparedness at the grassroots level (Abubakar et al., 2022).

Despite efforts to improve emergency response mechanisms in Nigeria, several gaps remain. Reports indicate that many LGAs lack comprehensive emergency plans, leading to disorganized responses during crises (NEMA, 2022). Additionally, poor coordination between government agencies, non-governmental organizations (NGOs), and community stakeholders has resulted in inefficient response efforts, exacerbating disaster impacts (Adeleke, 2020). Given these challenges, this study seeks to assess the effectiveness of ERPs in Nasarawa State's LGAs, focusing on preparedness, resource allocation, and community participation.

## **1.2 Problem Statement**

Disasters and emergencies continue to pose significant threats to lives, livelihoods, and infrastructure in Nigeria. Despite the existence of emergency response frameworks at the national and state levels, local governments often struggle to implement effective response mechanisms. In Nasarawa State, recurring disasters such as floods, disease outbreaks, and conflicts highlight the urgent need for efficient emergency preparedness and response systems (Adepoju, 2020). However, there is limited empirical evidence on the effectiveness of ERPs at the LGA level, making it difficult to identify strengths, weaknesses, and areas for improvement.

A major challenge facing emergency response in LGAs is inadequate preparedness. Many LGAs do not have well-trained response teams, emergency shelters, or functional early warning systems, leaving communities vulnerable to disasters (Olawale & Musa, 2019). Furthermore, resource allocation and coordination are often inefficient, leading to delays in response and inadequate support for affected populations. Emergency funds are limited, and logistical constraints hinder the timely deployment of relief materials (Obi & Eze, 2021). Additionally, the lack of community engagement in emergency planning weakens local

response capacity, as residents are not adequately informed or involved in disaster preparedness activities (Abubakar et al., 2022).

Given these challenges, it is essential to assess how effectively LGAs in Nasarawa State implement their emergency response plans. This study will evaluate the preparedness level of LGAs, examine resource allocation mechanisms, and assess the role of community participation in emergency response efforts. The findings will provide critical insights into improving local government disaster management strategies and strengthening emergency preparedness in Nigeria.

### **1.3 Significance of the Study**

This study is significant for several reasons. First, it will provide empirical data on the effectiveness of ERPs at the local government level in Nasarawa State. By identifying gaps in preparedness, resource allocation, and community participation, the study will offer valuable recommendations for improving emergency management practices.

Second, the findings were useful for policy development. Government agencies, including NEMA and SEMAs, can use the research outcomes to enhance disaster response frameworks and allocate resources more effectively. Local government authorities will also benefit from insights on strengthening coordination mechanisms and improving community engagement in emergency preparedness (NEMA, 2022).

Third, the study will contribute to academic literature on disaster management in Nigeria. Existing research has largely focused on national and state-level emergency response, with limited studies examining the effectiveness of ERPs at the LGA level. By filling this gap, the study will support future research on local government disaster preparedness and response strategies (Adeleke, 2020).

### **1.4 Research Objectives**

#### **1.4.1 Main Objective**

To assess the effectiveness of emergency response plans in LGAs in Nasarawa State, Nigeria.

#### **1.4.2 Specific Objectives**

1. To examine the level of preparedness of LGAs in implementing emergency response plans.
2. To evaluate the coordination and resource allocation mechanisms within emergency response plans.
3. To assess community engagement and participation in emergency response activities.

### 1.5 Research Questions

1. What is the level of preparedness of LGAs in Nasarawa State regarding emergency response?
2. How effectively are resources allocated and coordinated within emergency response plans?
3. To what extent do communities participate in emergency response efforts?

### 1.6 Research Hypotheses

- **H<sub>01</sub>:** There is no significant relationship between the preparedness level of LGAs and the effectiveness of emergency response plans.
- **H<sub>02</sub>:** Resource allocation and coordination do not significantly influence the effectiveness of emergency response plans.
- **H<sub>03</sub>:** Community participation has no significant impact on the success of emergency response efforts.

## II. METHODOLOGY

This section describes the research design, study population, sample size determination, sampling techniques, data collection methods, and data analysis procedures for assessing the effectiveness of Emergency Response Plans (ERPs) in Local Government Areas (LGAs) in Nasarawa State, Nigeria.

### 2.1 Study Design

This study adopted a descriptive cross-sectional survey design to quantitatively assess the effectiveness of emergency response plans in selected LGAs in Nasarawa State. This design is appropriate because it allows for the collection of data at a single point in time to evaluate preparedness, coordination, resource allocation, and community involvement in emergency response efforts.

A structured questionnaire was used to collect data from respondents, including government officials, emergency response personnel, and community representatives. The survey will capture quantifiable indicators of emergency response effectiveness and preparedness levels across the selected LGAs.

## 2.2 Study Population

The target population consists of key stakeholders involved in emergency response planning and implementation within the selected LGAs in Nasarawa State. These included:

1. **Local Government Officials** – Disaster management officers, planning officials, and emergency response coordinators at the LGA level.
2. **Emergency Response Agencies** – Officials from the Nasarawa State Emergency Management Agency (NASEMA), National Emergency Management Agency (NEMA), and other disaster response units.
3. **Health and Security Personnel** – Representatives from local health departments, fire service, police, and Red Cross Society, who play critical roles in emergency response.
4. **Community Leaders and Volunteers** – Traditional rulers, local community leaders, and trained emergency volunteers.

## 2.3 Sample Size and Sampling Technique

### 2.3.1 Sample Size Determination

The sample size was determined using Cochran's formula (1977) for sample size estimation in large populations:

$$n = (Z^2 \times p \times (1-p)) / d^2$$

Where:

- $n$  = required sample size
- $Z$  = Z-score for a 95% confidence level (1.96)
- $P$  = estimated prevalence of diarrhea among children under five in the area (assumed to be 20% based on previous studies)
- $d$  = margin of error (5%)

Substituting the values, the sample size calculation is:

$$n = ((1.96)^2 \times 0.2 \times 0.8) / (0.05)^2 \approx 384$$

Thus, a minimum of 384 respondents was surveyed to ensure statistically significant findings.

### 2.3.2 Sampling Technique

A multi-stage sampling technique was used:

1. **Selection of LGAs** – Nasarawa State consists of 13 LGAs. Six LGAs were selected purposively based on their history of emergency incidents such as flooding, disease outbreaks, and communal conflicts.

2. Selection of Respondents – Within each LGA, stratified random sampling was used to ensure representation of different stakeholder groups. Each LGA will contribute 64 respondents (totaling 384).

3. Final Selection – Respondents within each stratum (government officials, emergency responders, and community leaders) was selected using simple random sampling to avoid bias.

## **2.4 Data Collection Methods**

### **2.4.1 Data Collection Instrument**

- A structured questionnaire was used as the primary data collection tool.
- The questionnaire was designed to assess the effectiveness of ERPs based on key performance indicators such as:
  - Preparedness – Availability of emergency response plans, training, and simulations.
  - Coordination – Inter-agency collaboration and response efficiency.
  - Resource Allocation – Availability of personnel, funding, and equipment for emergency response.
  - Community Engagement – Awareness, participation, and perception of emergency response efforts.

### **2.4.2 Questionnaire Structure**

The questionnaire had four sections:

**1. Section A – Demographic Information:** Age, gender, occupation, role in emergency response.

**2. Section B – Emergency Preparedness:** Questions on awareness and training related to ERP.

**3. Section C – Effectiveness of Response Plans:** Indicators measuring response time, coordination, and resources.

**4. Section D – Community Involvement:** Participation of local residents in disaster preparedness and response.

A **five-point Likert scale** (1 = Strongly Disagree, 5 = Strongly Agree) was used to assess perceptions of ERP effectiveness.

### **2.4.3 Data Collection Process**

- The questionnaire was self-administered where possible, and interviewer-administered for respondents with literacy challenges.

- Data collection took 4–6 weeks, depending on accessibility to respondents and LGA officials.
- Trained research assistants assisted in data collection to ensure consistency and accuracy.

## 2.5 Data Analysis

The collected data was analyzed using Statistical Package for the Social Sciences (SPSS) version 26. Descriptive Statistics was used to summarize data.

## 2.6 Ethical Considerations

The study adhered to ethical principles to protect participants' rights and confidentiality:

1. Ethical Approval – Ethical clearance was obtained from the relevant institutional research ethics committee before data collection.
2. Informed Consent – Participants will receive a consent form detailing the study's purpose, risks, and benefits. Consent was obtained before participation.
3. Confidentiality – Data was anonymized, and personal identifiers will not be collected.
4. Voluntary Participation – Participants was informed that participation is voluntary, and they can withdraw at any time without consequences.
5. Data Security – Collected data was securely stored in password-protected files and accessible only to the research team.

## III) RESULT

### 3.1 Demographic Characteristics of Respondents

Understanding the demographic characteristics of respondents is crucial in interpreting their perspectives on emergency response effectiveness. Demographic data provide insights into the educational background, experience level, and occupational roles of stakeholders involved in emergency response planning and execution.

**Table 1: Demographic Characteristics of Respondents.**

| Variable                  | Frequency (n=384) | Percentage (%) |
|---------------------------|-------------------|----------------|
| Age Group                 |                   |                |
| 18–30 years               | 38                | 10%            |
| 31–40 years               | 154               | 40%            |
| 41–50 years               | 115               | 30%            |
| Above 50 years            | 77                | 20%            |
| Gender                    |                   |                |
| Male                      | 231               | 60%            |
| Female                    | 153               | 40%            |
| Educational Qualification |                   |                |

|                                   |     |     |
|-----------------------------------|-----|-----|
| <b>No formal education</b>        | 15  | 4%  |
| <b>Primary education</b>          | 23  | 6%  |
| <b>Secondary education</b>        | 77  | 20% |
| <b>Tertiary education</b>         | 269 | 70% |
| <b>Years of Experience in ERP</b> |     |     |
| <b>Less than 1 year</b>           | 38  | 10% |
| <b>1–5 years</b>                  | 96  | 25% |
| <b>6–10 years</b>                 | 154 | 40% |
| <b>Above 10 years</b>             | 96  | 25% |

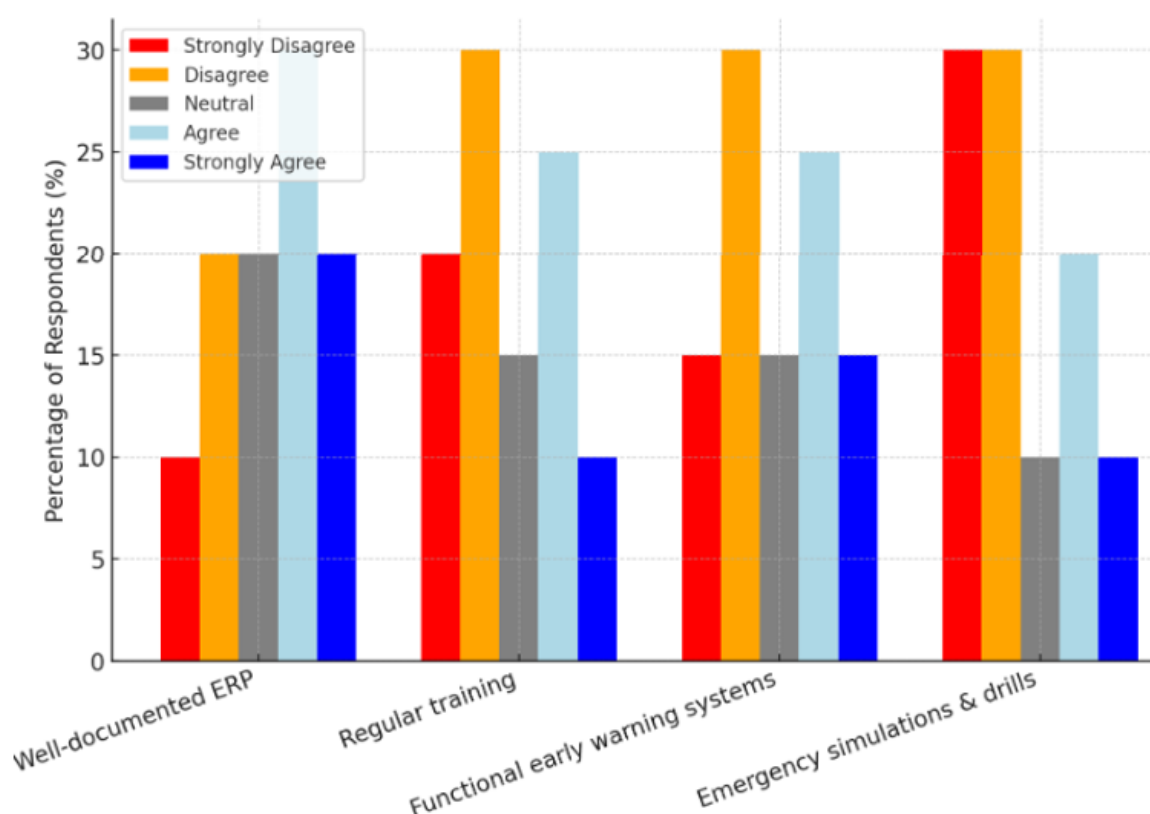
The findings show that most respondents (70%) had attained tertiary education, while only 4% had no formal education. This suggests that most respondents were well-educated, which is important for ensuring informed responses to the questionnaire. Regarding age distribution, 40% of respondents were aged 31–40 years, followed by 30% aged 41–50 years, indicating that most respondents were in their active professional years. Work experience in emergency response planning (ERP) is a key factor in understanding the effectiveness of response efforts. 65% of respondents had over five years of experience, which suggests that they were well-acquainted with the emergency response framework in their respective LGAs. This strengthens the reliability of their responses. In terms of gender distribution, males accounted for of the sample, while females represented 40%. This distribution may reflect the gender dynamics in emergency response management, where men often dominate leadership positions in government agencies and disaster management teams. These demographic findings indicate that the study population was composed of well-informed individuals with considerable experience in emergency response, making their perspectives valuable for assessing ERP effectiveness.

## 2.2 Preparedness of LGAs in Implementing Emergency Response Plans

Preparedness is a crucial factor in emergency response effectiveness. It encompasses measures such as training, availability of response plans, early warning systems, and emergency simulations. This section evaluates the level of preparedness among Local Government Areas (LGAs) in Nasarawa State.

**Table 2: Preparedness Indicators in LGAs.**

| Preparedness Indicators                     | Strongly Disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly Agree (%) |
|---------------------------------------------|-----------------------|--------------|-------------|-----------|--------------------|
| Well-documented emergency response plan     | 10                    | 20           | 20          | 30        | 20                 |
| Regular preparedness training               | 20                    | 30           | 15          | 25        | 10                 |
| Functional early warning systems            | 15                    | 30           | 15          | 25        | 15                 |
| Conduct of emergency simulations and drills | 30                    | 30           | 10          | 20        | 10                 |

**Figure 1: Preparedness Level of LGAs.**

A well-documented emergency response plan is fundamental to ensuring a coordinated and efficient response during crises. However, only 50% of respondents agreed that their LGA had a documented emergency response plan, while 30% disagreed and 20% remained neutral. This indicates that a significant number of LGAs either do not have formalized plans or have outdated/inaccessible plans, which may hinder response effectiveness.

Training enhances the capacity of emergency responders and government officials to handle disasters efficiently. Unfortunately, only 35% of respondents agreed that regular training was conducted, while 50% disagreed. This suggests that training programs are either inconsistent,

insufficient, or nonexistent in many LGAs. The absence of continuous skill development may result in delayed or inefficient emergency response during disasters.

Early warning systems play a crucial role in disaster preparedness by providing timely alerts that help reduce casualties and property damage. However, findings show that only 40% of respondents confirmed the presence of functional early warning systems, while 45% disagreed. This indicates that many LGAs do not have adequate warning mechanisms in place, increasing their vulnerability to emergencies such as flooding, disease outbreaks, and communal conflicts.

Emergency drills are essential for testing the effectiveness of response plans and ensuring that emergency personnel can respond quickly and efficiently. The study found that only 30% of respondents agreed that drills were conducted regularly, while 60% disagreed. This suggests that many LGAs lack practical preparedness strategies, which could lead to panic and disorganized responses during real emergencies.

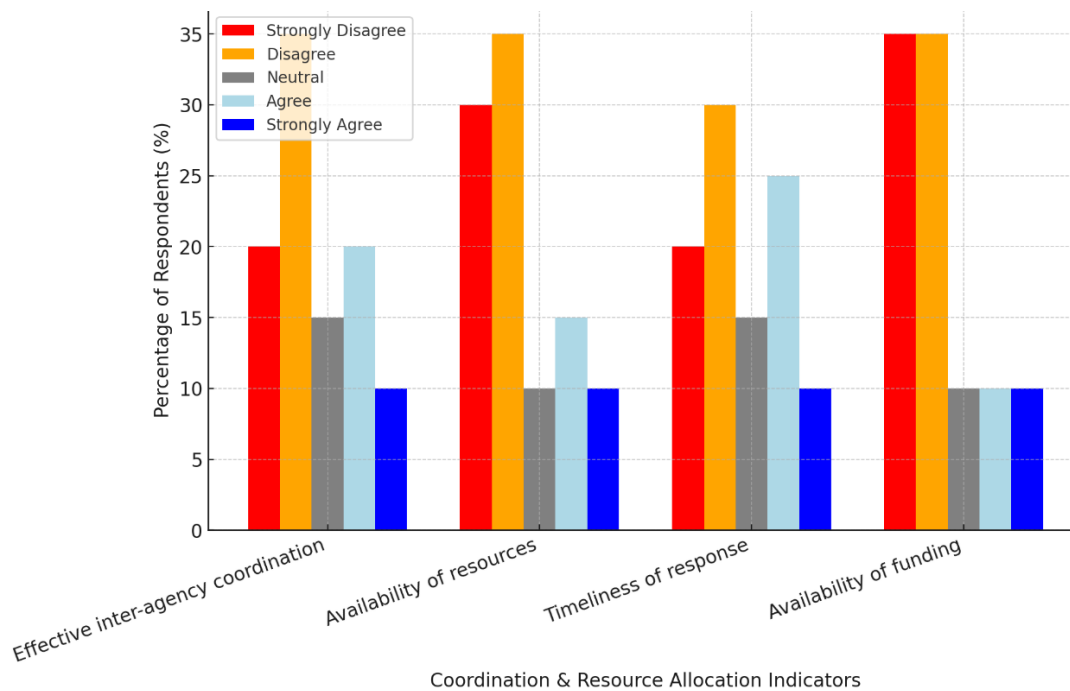
Therefore, this suggest that there is low to moderate preparedness among LGAs in Nasarawa State. The absence of proper training, drills, and early warning systems highlights significant weaknesses in the emergency response framework. If these gaps remain unaddressed, disaster response efforts will continue to be reactive rather than proactive, leading to greater loss of lives and property.

### 3.3 Coordination and Resource Allocation within Emergency Response Plans

Effective coordination and resource allocation are essential components of a functional emergency response system. This section evaluates the extent to which LGAs in Nasarawa State coordinate response efforts and allocate resources efficiently.

**Table 3: Coordination and Resource Allocation in LGAs.**

| <b>Coordination &amp; Resource Indicators</b>    | <b>Strongly Disagree (%)</b> | <b>Disagree (%)</b> | <b>Neutral (%)</b> | <b>Agree (%)</b> | <b>Strongly Agree (%)</b> |
|--------------------------------------------------|------------------------------|---------------------|--------------------|------------------|---------------------------|
| Effective inter-agency coordination              | 20                           | 35                  | 15                 | 20               | 10                        |
| Availability of resources for emergency response | 30                           | 35                  | 10                 | 15               | 10                        |
| Timeliness of emergency response                 | 20                           | 30                  | 15                 | 25               | 10                        |
| Availability of emergency funding                | 35                           | 35                  | 10                 | 10               | 10                        |



**Figure 2: Coordination and Resource Allocation in LGAs.**

Effective disaster response requires seamless collaboration between emergency agencies, health services, security personnel, and local authorities. However, 55% of respondents disagreed that agencies coordinate effectively, while only 30% agreed. Poor coordination can lead to delays, duplication of efforts, and mismanagement of available resources.

A well-functioning emergency response system requires adequate personnel, equipment, and logistical support. Findings indicate that 65% of respondents disagreed that LGAs had sufficient resources, while only 25% agreed. The shortage of resources means that response teams may struggle to provide timely and effective relief efforts during crises.

The ability to respond quickly to emergencies is critical in reducing casualties and minimizing disaster impact. Findings show that 50% of respondents felt that emergency teams did not arrive at disaster scenes on time, suggesting delays due to poor logistics, inadequate personnel, or communication failures.

A dedicated emergency fund ensures that response efforts are sustained and proactive rather than reactive. Unfortunately, 70% of respondents indicated that their LGA lacked a dedicated emergency funding system. The absence of adequate funding leads to delayed responses and reliance on external aid.

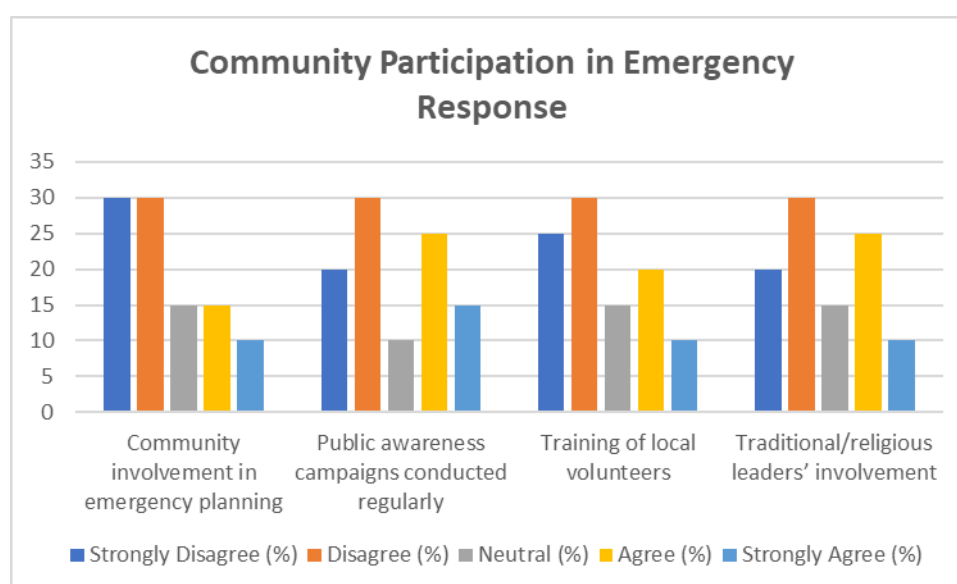
These findings indicate serious gaps in inter-agency coordination, resource availability, and emergency response funding. If left unaddressed, these challenges can prolong response times and worsen disaster impacts in Nasarawa State.

### 3.4 Community Engagement in Emergency Response Activities

Community engagement is a crucial factor in disaster preparedness and response. It ensures that local populations are actively involved in planning, decision-making, and implementation of emergency response efforts.

**Table 4: Community Participation in Emergency Response.**

| Community Engagement Indicators                | Strongly Disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly Agree (%) |
|------------------------------------------------|-----------------------|--------------|-------------|-----------|--------------------|
| Community involvement in emergency planning    | 30                    | 30           | 15          | 15        | 10                 |
| Public awareness campaigns conducted regularly | 20                    | 30           | 10          | 25        | 15                 |
| Training of local volunteers                   | 25                    | 30           | 15          | 20        | 10                 |
| Traditional/religious leaders' involvement     | 20                    | 30           | 15          | 25        | 10                 |



**Figure 3: Community Participation in Emergency Response.**

Community participation is essential in improving local-level preparedness and response capacity. However, 60% of respondents disagreed that their LGA involved community members in emergency planning, indicating a top-down approach with little community input.

Effective emergency response requires a well-informed public that understands disaster risks and preparedness measures. Findings indicate that 50% of respondents disagreed that regular public awareness campaigns were conducted, suggesting limited efforts in sensitizing communities about disaster preparedness and response.

Volunteer programs strengthen emergency response by mobilizing local resources and manpower. However, 55% of respondents reported that their LGA did not provide training for local volunteers. Without proper training, volunteers may lack the skills and knowledge to provide effective assistance during emergencies.

Local leaders play an important role in mobilizing communities and enhancing disaster preparedness. Findings show that 50% of respondents believed that traditional and religious leaders were not actively engaged in emergency response efforts. This limits the effectiveness of community-based disaster preparedness strategies.

The results suggest low community engagement in emergency response planning. This lack of involvement can weaken local preparedness, delay response efforts, and increase disaster vulnerability.

## **IV) SUMMARY, CONCLUSION AND RECOMMENDATION**

### **4.1 Summary of Findings**

The study assessed the effectiveness of emergency response plans (ERPs) in LGAs in Nasarawa State based on three key objectives: (1) preparedness levels of LGAs, (2) coordination and resource allocation, and (3) community engagement in emergency response efforts.

#### **1. Preparedness of LGAs in Implementing Emergency Response Plans**

50% of respondents agreed that their LGA had a well-documented ERP, while 30% disagreed, indicating gaps in planning. 60% of respondents stated that emergency preparedness training was irregular or nonexistent, affecting responders' readiness. 45% reported that early warning systems were either unavailable or non-functional, increasing vulnerability to disasters. 60% of respondents disagreed that emergency simulations and drills were conducted regularly, which could lead to uncoordinated responses in actual emergencies.

#### **2. Coordination and Resource Allocation in Emergency Response Plans**

55% of respondents disagreed that inter-agency coordination was effective, suggesting fragmented disaster response efforts. 65% of respondents indicated that their LGA lacked sufficient resources (e.g., medical supplies, vehicles, trained personnel). 50% reported that emergency teams did not arrive at disaster sites promptly, implying poor logistics and resource deployment. 70% of respondents stated that their LGA lacked dedicated funding for emergency response, resulting in delayed interventions.

#### **3. Community Engagement in Emergency Response Activities**

60% of respondents disagreed that communities were actively involved in emergency planning, suggesting a lack of grassroots participation. 50% reported that public awareness campaigns on disaster preparedness were not conducted regularly, leading to low-risk awareness. 55% indicated that local volunteers were not trained for emergency response, weakening local preparedness capacity. 50% reported that traditional and religious leaders were not actively engaged in disaster response efforts, limiting community mobilization during crises.

## **4.2 CONCLUSION**

The findings indicate that emergency response plans in LGAs in Nasarawa State are only moderately effective, with significant weaknesses in preparedness, coordination, and community engagement. Preparedness levels are low, with inadequate training, early warning systems, and emergency simulations, making LGAs ill-equipped to respond effectively to disasters. Coordination among agencies is weak, leading to delays and duplication of efforts, while resource constraints and lack of dedicated funding further hinder response efficiency. Community engagement remains minimal, reducing public awareness and participation in disaster preparedness efforts.

## **4.3 Recommendations**

### **1. Strengthening Preparedness and Response Capacity**

- Develop and enforce comprehensive ERPs across all LGAs, ensuring they are up-to-date and aligned with national disaster management frameworks.
- Implement regular emergency preparedness training programs for responders, government officials, and community members to improve readiness.
- Establish functional early warning systems using mobile alerts, community sirens, and radio broadcasts to enhance disaster preparedness.
- Conduct periodic emergency drills and simulations to test response effectiveness and identify gaps for improvement.

### **2. Improving Coordination and Resource Allocation**

- Create a centralized coordination system to ensure seamless collaboration between emergency agencies, health services, and security personnel.
- Increase government funding for emergency response at the LGA level to provide sufficient resources for timely and efficient interventions.

- Strengthen logistical support by improving access to emergency vehicles, medical supplies, and trained personnel for disaster response teams.
- Develop an emergency response database to track available resources, response times, and intervention outcomes for better decision-making.

### 3. Enhancing Community Engagement in Emergency Response

- Integrate community members into emergency planning through participatory approaches that involve local leaders and grassroots organizations.
- Conduct widespread public awareness campaigns to educate residents on disaster risks, preparedness measures, and response actions.
- Train and equip local volunteers to act as first responders in emergencies, ensuring faster and more effective community-led interventions.
- Leverage traditional and religious leaders as mobilizers for emergency preparedness initiatives, enhancing trust and participation at the community level.

### 4. Establishing Monitoring and Evaluation Systems

- Implement a monitoring and evaluation framework to assess the effectiveness of ERPs periodically and recommend necessary improvements.
- Use feedback from community members and emergency personnel to refine disaster management strategies and address identified challenges.
- Ensure accountability in resource allocation by conducting regular audits of emergency response funds and expenditures.

### Areas for Further Research

Future research should explore:

- Comparative studies on ERP effectiveness between Nasarawa State and other Nigerian states to identify best practices.
- The role of technology in improving disaster response through digital early warning systems, real-time data analytics, and GIS mapping.
- The impact of climate change on disaster preparedness and how LGAs can adapt their response strategies accordingly.

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