

The Role of Disaster affected people on Natural Disaster Management in Godavari Districts of Andhra Pradesh- An Overview

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Abstract

In order to guarantee that all branches of government take action to prevent and lessen the effects of disasters, as well as to respond promptly and thoroughly to handle the situation involving a disaster, the Disaster Management Act established institutional mechanisms to oversee the creation of disaster management plans. Accordingly, studies were carried out to investigate the government's involvement and response of the disaster affected people on disaster management activities in the Andhra Pradesh Godavari Districts. For this purpose, data was collected from the parties involved using a questionnaire. For this study, two villages and thirty impacted households from each of the six primarily afflicted mandals in the Godavari districts were selected. Three hundred and sixty people completed the poll and shared their opinions about the state government's response, readiness, and rehabilitation activities in the case of a disaster. Thus, the results demonstrated that the victims of the disaster-affected area thought they had gotten efficient rehabilitation and restoration of lost property from the government in terms of readiness, preventive, reactive, and recovery activities.

Keywords: Disaster Management, NDRF, APSDMA, Medical facilities, Transportation, Communication and Shelter.

1. Introduction

Disaster management is primarily concerned with information and resource management leading up to a catastrophic occurrence. It is evaluated based on how smoothly, successfully, and efficiently these resources are coordinated. The ability of contemporary technology to handle calamities efficiently has grown more difficult. Disaster management at the individual and organizational level deals with concerns of planning, coordination, communication and risk assessment. A number of factors, such as resource loss, program interruption, effects on the investment climate, effects on the non-formal sector, and social and political ramifications, can cause disasters to significantly impede development endeavours. It is not always necessary to finish one phase of the cycle before moving on to the next, as disaster management is a cyclical process where one phase ends and another begins. Many times, multiple phases are happening at once. Making decisions on time at each stage leads to improved alerts, decreased susceptibility, increased readiness, and/or the avoidance of future tragedies. The creation of governmental policies and programs that either address the causes of catastrophes or lessen their consequences on people, property, and infrastructure is a crucial part of the full disaster management cycle. As preparations are undertaken in advance of an event, the phases of mitigation and preparedness take place. A community can better prepare for and mitigate against disasters by welcoming development. Disaster managers participate in both the short-term response and long-term recovery stages as the incident develops. Mitigation refers to actions taken to lessen the effects of a calamity. Zoning and building codes, vulnerability assessments,

and public education are a few examples. Being ready means figuring out how to react. Examples include warning systems, emergency drills and training, and preparedness plans. Responses are the first things done when anything happens. It includes actions taken to reduce the risks that a disaster creates. Examples include relief from emergencies, evacuation, and search and rescue. Recovery means bringing the community back to its regular state. The afflicted area must be restored to as good of condition as it was prior to the calamity. Examples include grants, short-term housing, and health treatment. The District was created in 1925 as a remnant of the former Godavari District following the division of the West Godavari District. East Godavari District is intimately linked to the Godavari River, as implied by its name, as it occupies a significant chunk of the delta region. Kakinada is home to the District Headquarters. East Godavari District is located on Andhra Pradesh's north-east coast. It is bordered to the north by the districts of Visakhapatnam and Orissa, to the east and south by the Bay of Bengal, and to the west by the districts of Khammam in Telangana State and West Godavari Districts. 12,805 square kilometers make up the district, including the recently created Yetapaka Division. The District lies between latitudes 16° 30' and 18° in the north. The Godavari splits into three sections beyond Dowleswaram, and the Vasistha river, which is on the west, creates the border between the two districts. Vasistha is the western boundary of the Godavari, while everything east of it is the eastern boundary. And the region between the Vasistha and Gouthami rivers is the most picturesque part of Konaseema. The primary focus of this study paper is the APSDMA's role in disaster management in the Godavari Districts of Andhra Pradesh.

2. Review of Literature

Renu bali (2024) claimed that throughout the last ten years, there have been several notable natural catastrophes (2000-2019). The majority of these disasters were brought on by climate change, and 7348

major disaster events were officially recorded worldwide in 1999, as opposed to 4212 in 1980. These disasters, which claimed 12 million lives, affected almost 4.03 billion people. Due to its vast territory, distinct physiography, and high population, Asia has experienced more natural disasters than any other

continent. Third among all affected nations worldwide, India had 321 occurrences that resulted in both economic losses and human casualties. The enormous frequency of disasters, their devastating destruction of people and property, and the harm they inflict to ecosystems have highlighted the need of understanding and managing catastrophes appropriately, regardless of whether they are caused by natural or human factors.

Amrutha et al., (2023) outlined the rise in landslides that has occurred recently on the windward side of the Western Ghats. Kerala saw terrible landslides and floods between 2018 and 2021 that left many dead and damaged property. The study looked at how geography, physical traits, geology, and human activities affected the frequency of landslides in the windward slope of the Western Ghats. Based on recently observed landslide locations in the minimal river basin, with special reference to Kootikal, the landslide susceptibility was assessed using the frequency ratio approach. To obtain the frequency ratio value, each factor's effect was compared to the GPS coordinates of the locations of landslides. The findings demonstrated that human activities, notably the work done in the area to manage watersheds, as well as the heavy rains Kerala saw significantly increased the basin's susceptibility to landslides. The 5% of the Manimala River Basin that is particularly vulnerable to landslides is part of the Kootikal sub-basin. The report recommends a comprehensive geophysical assessment of the effect of watershed management techniques on landslides and road erosion in the Kootikal region.

Deshpande (2022) outlined how addressing poverty and destitution as well as identifying susceptible areas is necessary for disaster preparedness, which is a critical component of societal resilience. Institutional frameworks, community involvement, and collaboration with local administrations and the NDRF have all been introduced by governments. In order to manage risks and lessen reliance on the government, public awareness and community ability are crucial. Unpredictability in disasters means that human knowledge and inventiveness are needed to protect against unforeseen hazards.

David Alexander (2021) discovered that case studies spanning both historical and contemporary periods show how debates on the reliability of the evidence can occasionally carry on forever. On other occasions, it is entirely ignored. False conclusions derived from data may also be utilized as data in other situations. Sometimes, nevertheless, there is a conspicuous lack of evidence in catastrophe risk reduction, even when it is required. Efficient counterterrorism measures are one such field. To summarize, the primary significance of evidence is its ability to facilitate the development of policies, especially when presented

in a clear and comprehensible manner. Objective interpretation of the evidence may never be totally eliminated, and policymakers cannot be urged to make better.

Vibhas Sukhwani et al., (2020) claimed that in order to counteract the rising frequency and intensity of natural disasters, human cultures have employed a variety of structural and non-structural solutions. Early Warning Systems (EWSs) are considered as one of the most significant non-structural techniques for disaster preparedness and mitigation due to their many benefits. The current study makes the assumption that there are three main categories into which the many barriers to effective EWS operation can be divided: knowledge, technology, and institutional constraints. To support this assertion, the study gives an account of three specific flood disasters that occurred in North Kyushu, Japan, Sri Lanka, and the Cameron Highlands of Malaysia. The paper explains the primary factors influencing flood-EWSs' timely operation in respect to barriers. It offers an alternative viewpoint for comprehending obstacles and improving the functionality of EWSs in times of calamity. In order to establish contextual awareness in various places and to comprehend technology, institutional concerns, and traits peculiar to a given site, more research is required.

3. Objectives of the Study

The purpose of the study is to study the responses of disaster affected people on disaster management activities conducted by the APSDMA in Godavari Districts of Andhra Pradesh.

4. Research Methodology

For both the quantitative and qualitative portions of the study, the researcher recruited the necessary number of respondents using the purposive stratified random sampling approach. For this study, two villages and thirty impacted households from each of the six primarily afflicted mandals in the Godavari districts were selected. Three hundred and sixty disaster affected people (6 Mandals * 2 villages * 30 disaster affected people) completed the poll and shared their opinions about the state government's response, readiness, and rehabilitation activities in the case of a disaster. The researcher continued to conduct in-depth interviews with people until data saturation was reached. Through the use of a research questionnaire, the study combined qualitative and quantitative approaches to collect primary data from participants. For qualitative reasons, the percentage and frequency analysis as well as score-based rank analysis for qualitative purposes. Secondary source data was acquired through books, articles, journals, internet, and other applicable documents were also used for this study. For processing and analysis, the gathered data was input into a computer using the Statistical Packages for Social Sciences (SPSS-24). At first, every piece of data was examined and examined for any missing information.

5. Demographic Status of the respondents

The respondents' demographic features related to age-wise distribution, gender, education level, occupation and annual income level is assessed as shown in Table 1.

6. Table 1. Respondents Demographic Status (n=360)

Parameters		Frequency	Percentage
Age	Below 30 Years	113	31
	31-40 Years	106	29
	41-50 Years	81	23
	Above 50 Years	60	17
Gender	Male	164	46
	Female	196	54
Education	Secondary	109	30
	Higher Secondary	108	30
	Graduation	81	23
	Post-Graduation	62	17
	Government Employee	72	20
	Private Employee	84	23

Occupation	Self Employed	46	14
	Business	124	34
	Professional	34	9
Monthly Income (in Rs.)	Less than 10,000	112	31
	10,000 to 30,000	100	28
	30,000 to 50,000	97	27
	Above 50,000	51	14
Family Size	Nuclear	142	39
	Joint	218	61
Type of House	Thatched Hut	81	23
	Semi Pucca	181	50
	Pucca	98	27

The above Table-1 related to the demographic details of the disaster affected people which clearly indicates that 60 percentage of the respondents are below 40 years, in the case of gender- 54 percentage of the respondents are female and remaining are male. 40 percent of the respondents are at or above graduation and 20 percent of the respondents are from Government sector and remaining are from non- Government sectors. 59 percent of the respondents are having a monthly salary of less than Rs. 30k. Majority of the respondents are having the family size of joint and half of the respondents are having SemiPucca houses.

7. Table-2 Opinions of the Respondents about Medical Facilities provided by the APSDMA (n=360)

S. No.	Role in Post Disasters	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree	Mean
1.	Psychological counselling conducted to the victims for rejoining their normal life.	38	42	60	65	155	3.72
		10%	12%	17%	18%	43%	
2.	Counselling sessions arranged to build emotional strength among the individual who are feeling of panic.	41	46	45	70	158	3.72
		11%	13%	13%	19%	44%	
3.	Conducted medical camps in the disaster affected area to protect the public from infectious diseases.	36	49	17	84	174	3.85
		10%	14%	5%	23%	48%	

The above table-2 explains that above 40 percent of the respondents are strongly agreed with the psychological counselling for building emotional strength and protecting public from infectious diseases.

8. Table-3 Opinions of the Respondents about Financial Support (n=360)

S. No.	Role in Post Disasters	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree	Mean
1.	Raised rehabilitation fund from the local communities for reconstruction activities.	29	38	44	103	146	3.82
		8%	11%	12%	29%	40%	
2.	Coordinated local body administrators to sanction disaster relief fund to the effected people.	27	48	32	66	187	3.93
		8%	13%	9%	18%	52%	
3.	The financial support extended by Government and Private Organisations is distributed fairly.	19	34	11	71	225	4.27
		5%	9%	3%	20%	63%	

The above table-3 represented that 63 percent of the respondents are strongly agreed about the financial support extended, 52 percent of the respondents are strongly agreed about the sanctioning of disaster relief fund and 40 percent of the respondents are strongly agreed about the reconstruction activities.

9. Table-4 Opinions of the Respondents about Support for cleaning and restoring living conditions at home (n=360)

S. No.	Role in Post Disasters	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree	Mean
1.	Provided family rehabilitation kits like floor mats, blankets, clothes, candles, matchboxes, etc.	16	32	18	84	210	4.23
		4%	9%	5%	24%	58%	
2.	Conducted rehabilitation activities in the disaster areas.	53	59	24	86	138	3.54
		15%	16%	7%	24%	38%	
3.	Coordinated local clubs to involved in the rescue, relief and rehabilitation activities.	32	49	14	81	184	3.94
		9%	13%	4%	23%	51%	

The above table-4 explained that 51 percent of the respondents are strongly agreed on rescue, relief and rehabilitation activities, 38 percent of the respondents are strongly agreed about rehabilitation activities and 58 percent are strongly agreed about the provision of rehabilitation kits.

10. Table-5 Opinions of the Respondents about Transport Facilities (n=360)

S. No.	Role in Post Disasters	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree	Mean
1.	Arranged adequate transport facilities to return homes safely.	16	21	13	95	215	4.32
		4%	6%	4%	26%	60%	
2.	Adequate transport facilities arranged to	19	27	21	85	208	

	carry the essential items back to home	5%	8%	6%	24%	57%	4.2
3.	Special transport facilities are provided for oldage and physically disabled persons	11	12	24	34	279	4.56
		3%	3%	7%	9%	78%	

The above table-5 clearly showed that 78 percent of the respondents are strongly agreed on the special transportation facilities for oldage and physically disabled persons, 57 percent of the respondents are strongly agreed upon the transportation of essential items and 60 percent are strongly agreed about the provision of adequate transportation.

11. Table-6 Opinions of the Respondents about Arrangements for Food & Water Supply (n=360)

S. No.	Role in Post Disasters	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree	Mean
1.	Provided safety drinking water in the disaster affected areas.	22	35	13	42	248	4.26
		6%	10%	4%	12%	68%	
2.	Arranged adequate and hygienic food to the people in the disaster rehabilitation centres.	17	49	08	35	251	4.25
		5%	14%	2%	9%	70%	
3.	Arranged camps for distribution the cooked meal to the victims.	89	76	21	40	134	3.14
		25%	21%	6%	11%	37%	

The above table-6 explained that 68 percent of the respondents are strongly agreed on provision of safely drinking water, 70 percent of the respondents are strongly agreed upon the arrangement of adequatehygienic food and 37 percent are strongly agreed about the arrangement of camps for cooked meals.

12. Discussion & Interpretation

The views expressed by respondents regarding the APSDMA's disaster management initiatives with regard to the Andhra Pradesh districts of Godavari, as well as the demographics of those affected by the disaster, including age group, gender, area, educational background, monthly income, occupation,

residential status, and type of home. The government must focus on the areas and reasons that the sample respondents revealed. The following are some of the respondents' observations regarding disaster management:

- (a) 17 percent of the respondents are unable to understand about the Psychological counselling conducted to the victims for rejoining their normal life due to educational background.
- (b) 5 percent of the respondents are not satisfied on the financial support extended by Government and Private Organisations is distributed fairly, because of unfair distribution of funds.
- (c) 15 percent of the respondents are strongly disagreed on rehabilitation activities in the disaster areas because some of the volunteers are unable to visit the disaster affected houses.
- (d) One fourth of the respondents are certainly unhappy on arrangements of camps for distribution the cooked meal to the victims due to unhealthy conditions of the disaster affected areas.
- (e) 12 percent of the respondents are not able to convey on raising of rehabilitation fund from the local communities for reconstruction activities due to unavailability of the data on disbursement of funds. Managerial Implications

It is proposed that the government take action to provide adequate housing and accommodations for those residing in disaster zones. Food hygiene and sewage disposal need to be well maintained. Public knowledge and confidence must be raised by appropriate guidelines and the provision of safety precautions in the event of a disaster. The government must act to ensure that all impacted individuals get disaster relief payments and benefits, regardless of their caste, community, religion, or other characteristics. In order to calculate actual losses and estimate societal and financial losses, certain rules must be followed. Drones and other advanced technologies increase the possibility of taking quick action, minimizing loss in every way.

13. Conclusion

The findings show that the government was involved in four significant aspects of preparedness, preventive, reaction, and recovery plans. As a result, it created a network among many organizations, including the Local Self Government and Private Organizations, to start planning and taking action as soon as the print and electronic media aired the cyclone warning. They organized support for the local government and other organizations, as well as the transportation of the weaker section to the adjacent rehabilitation facilities. Following the tragedy, the government started cleaning up sewage and human waste left behind, as well as providing public administration with training and education based on risk assessment and vulnerability analysis of disasters. In addition, the government constructed appropriate shelters and accommodations for the impacted population. Additionally, the government coordinated

health and medical services in the affected districts. As a result, the victims in the disaster-affected areabelieved that the government had successfully rehabilitated them.

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