

Perception of People towards Disaster Management : An Overview

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ABSTRACT

The eastern part of Odisha is vulnerable to disasters like flood and cyclone causing huge loss to the people. A study was undertaken with 80 affected people from 10 villages of 5 Gram Panchayats for altering their perception to disaster management. It has been observed that the people of the area should inform the details of information sufficiently ahead of the flood and cyclone. People must be made conscious about preserving safe drinking water, usable assets, materials for temporary shed and essential medicines. The government functionaries have to strengthen in selecting safety place for rehabilitation, stocking essential medicines and adequate arrangements for rescue and shifting of affected people immediately. Immediate action need to be taken for restoration of transport and communication system with all sanitation measures. People must be trained to develop their capability towards preparedness and mitigation measures.

Keywords: Vulnerable; Cyclone; Disaster; Flood; Disaster management; People;

India is the seventh largest country in the World and highly prone to disasters. The country is susceptible to all types of disasters i.e. earthquakes, drought, flood, cyclone, Tsunami, landslides, desertification etc. In India, 70 per cent area is drought prone, 60 per cent earthquake, 12 per cent flood and 8 per cent cyclone prone area (Gopal Krishnan *et al.* 2005). Disasters usually play with the lives of millions of people. The huge loss occurred by disaster had shaken our concern about disaster. The eastern part of Odisha is vulnerable to floods and cyclones and these are the natural phenomena occurring at regular interval (Mukhopodhyay, *et al.* (1992). The perception and impacts of disasters experienced by the people over the years indeed help them for gaining increased predictive power for which people can take management strategies to break the cycle of disasters and its damage, reconstruction and repeated damage (Acharya *at al.* 2009). On the basis of the above facts, an attempt has been made to assess the efficiency of the affected people in managing disasters.

METHODOLOGY

The study was undertaken in Pattamundai block of Kendrapara district in Odisha vulnerable to flood and cyclone. Eight farmers each from 10 villages of 5 Gram panchayats were selected randomly as the respondents for the study making total sample size of 80. Information was collected personally through a semi-structured schedule pre-tested earlier. Collected data were put in to statistical analysis to reveal the results.

RESULTS AND DISCUSSION

Information is transmitted through different media to appraise people about the occurrence of disaster and taking precautionary measures. It is observed from Table 1 that majority of the respondents had stated that they are always getting information on the occurrence of disasters from friends and relatives (62.50%) followed by electronic media television and radio (51.25%), Similarly, 27.50 per cent of the respondents stated for

getting information sometimes from local leaders about occurrence of disaster. Though mixed responses were obtained on print media like news papers, bulletins etc. but the mean score value indicated as the important source. Voluntary organizations also taking active part in disaster management but 62.50 per cent of the respondents had shared never getting information about the occurrence of disaster. The findings therefore reveal that the respondents are not getting information always from any of the source as mentioned in the Table. However friends and relatives followed by electronic and print media were the better source of information about occurrence of disasters.

Table 1. Source of information about occurrence of flood and cyclone (%) (N=80)

Source	Always	Sometimes	Never	MS	Gap
Print media	46.25	41.25	12.50	2.34	22.00
Electronic media	51.25	38.75	10.00	2.41	19.67
Public relation department	42.50	32.50	25.00	2.18	27.33
Local Leaders	27.50	52.50	20.00	2.08	30.67
Friends and relatives	62.50	22.50	15.00	2.48	17.33
Voluntary Organizations	10.00	27.50	62.50	1.40	53.33

The people of the affected area should get the information sufficiently ahead of the occurrence of the disaster so that they can take precautionary measures for preparedness and mitigation. As observed from Table 2, majority of 68.75 per cent had stated for getting information only one day before of the occurrence of disaster. Unless the affected people receive information much ahead, they cannot get sufficient time for taking preparatory and mitigation measures as one day is not adequate enough for taking precautionary measures.

Sufficient information about the occurrence of floods and cyclones need to be transmitted to the people

Table 2. Time of getting information on flood and cyclone (N=80)

Time of occurrence	No.	%
One day before	55	68.75
Two days before	16	20.00
Three days before	9	11.25

to take preparatory measures by assessing its intensity. Opinion of the respondents reveal that (Table 3) majority of the respondents strongly agreed for not giving sufficient information and insufficient attempt for ensuring food security (60.00%), insufficient planning for rehabilitation (58.75%) and information not received by all the people (55.00%). Similarly, majority of the respondents also agreed for other aspects as mentioned in the Table. It is therefore suggested that, the stakeholders involved in disaster management should analyze all these aspects and take appropriate measures for better warning system about occurrence of flood and cyclone.

Precautionary measures are always advisable for the management of disasters particularly flood and cyclone. Each affected family should have taken adequate precautionary measures for mitigation of the disasters. The data in (Table 4) reveal that majority of the respondents were always taking precautionary measures on safe storage of food grain (66.25%), collection and storing of cattle feed (57.50%), safe storage of valuable assets (56.25%), temporary shifting of domestic animals (53.76%) which are essential. Majority of the respondents were also taking precautionary measures sometimes on preserving ready to eat food materials (53.75%), preservation of safe drinking waters (55.00%) and safe storage of usable materials (58.75%). Mixed responses were obtained on collection of materials for temporary shed, collection of fuel for cooking food and collection of common

Table 3. Extent of information on occurrence of flood and cyclone (%) (N=80)

Information	Strongly agree	Agree	Disagree	MS	Gap
Sufficient information not given	60.00	36.25	3.75	2.56	14.67
Not covering all the people	55.00	45.00	0.00	2.55	15.00
No information about alternative measures	27.50	58.75	13.75	2.14	28.67
Casual approach	30.00	52.50	17.50	2.13	29.00
Insufficient planning for rehabilitation	58.75	30.00	11.25	2.48	17.33
Insufficient attempt for ensuring food security	60.00	30.00	15.00	2.40	20.00

Table 4. Precautionary measures taken by the people (%) (N=80)

Measure	Always	Sometimes	Never	MS	Gap
Safe strong of food grains	66.25	33.75	2.50	2.61	13.00
Preserving ready to eat food materials	41.25	53.75	5.00	2.36	21.33
Collection and storing of cattle feed	57.50	33.75	8.75	2.49	17.00
Preservation of safe drinking water	27.50	55.00	17.50	2.10	30.00
Safe storage of valuable usable materials.	13.75	58.75	35.00	1.94	35.33
Safe storage of valuable assets.	56.25	41.25	2.50	2.54	15.33
Temporary shifting of domestic animals	53.75	25.00	21.25	2.33	22.33
Collection of materials for temporary shed	15.00	45.00	40.00	1.75	41.67
Collection of fuel for cooking food	43.75	41.25	15.00	2.29	23.67
Collection of common medicines	10.00	55.00	35.00	1.75	41.67

Table 5. Precautionary measures taken by Government (%) (N=80)

Measure	Always	Sometimes	Never	MS	Gap
Safety place for rehabilitation	30.00	27.50	42.50	1.88	37.33
Stocking food materials for people land domestic	58.75	30.00	11.25	2.48	17.33
Stocking essential medicines	26.25	40.00	33.75	1.93	35.67
Stocking material for temporary shed	30.00	38.75	31.25	1.99	33.67
Arrangement for rescue	42.50	37.50	20.00	2.23	25.67
Arrangement for health care	27.50	35.00	37.50	1.90	36.67

Table 6. Post disaster management support by Government (%) (N=80)

Support	Always	Sometimes	Never	MS	Gap
Vaccination to people and animals	50.00	37.50	12.50	2.38	20.67
Adequate supply of food materials	43.75	45.00	11.25	2.33	22.33
Immediate restoration of transport system	43.75	47.50	8.75	2.35	21.67
Restoration of electricity and telephones	31.25	43.50	25.00	2.06	31.33
Temporary shed for rehabilitation in the village	32.50	45.00	22.50	2.10	30.00
Hygiene and sanitation measure	30.00	45.00	25.00	2.05	31.67

medicines for health and hygienic purpose which are equally important. Taking mean score value and percentage of gap, in to consideration, it is suggested that the organizations working in the area have to convince the affected people for preserving safe drinking water, safe storage of usable materials, collection of materials for temporary shed and collection of common medicines for health and hygienic purpose as precautionary measures against flood and cyclone in addition to other measures taken by them.

Odisha State Disaster Management Agencies are working for both pre and post disaster management activities. Precautionary measures taken by the govt. reveal that (Table-5) majority of 58.75 per cent of the

respondents had stated for stocking food materials for people and domestic animals. Mixed responses were obtained on other aspects as mentioned in the Table. Considering mean score value and gap percentage, it is suggested that the State Govt. should rare adequate measures stocking essential medicines both for people and domestic animals, arrangement for physicians for health care of people and domestic animals during disasters or immediately after disaster, stocking materials for temporary shed, safety place for rehabilitation, well arrangements for temporary shifting before disaster and adequate rescue operations during disaster.

Post disaster management is also essentially required for renovation and restoration of essential

assets. Mixed responses were obtained (Table-6) towards various post disaster management approaches except vaccination to people and animals where 50.00 per cent of the respondents opined favorably. As significant percentage of gap observed, it is suggested that the state govt. need to further strengthen towards adequate supply of food materials, immediate restoration of transport and communication system, hygienic and sanitation measures and temporary shed for rehabilitation in the village to safe guard the assets of the people after occurrence of flood and cyclone.

Table 7. Influence of Socio-economic variables on disaster management

Variable	'r' value	't' value
Age	0.180	1.616
Education	0.381**	3.632
Holding size	0.138	1.230
Social participation	0.237*	2.154
Sources of information	0.249*	2.271
Annual family income	0.267*	2.448

**Significant at 0.01 level

*Significant at 0.05 level

Socio-economic variables of the people many a times influence in increasing disaster management efficiency. It is observed from Table-7 that education, social participation; sources of information and annual family income influence the capabilities of the

respondents in management of disasters. It is therefore suggested that timely and adequate information about occurrence of disasters and capacity building of the people on disaster management will definitely help the people in preparedness and mitigation of disasters.

CONCLUSION

The findings of the study conclude that, the people of the flood and cyclone affected area should be informed the details of the occurrence of disaster sufficiently ahead. The people must be made conscious towards preserving safe drinking water, usable assets, materials common medicines and temporary shed in addition to other safety measures usually done by them. The govt. functionaries have to strengthen the precautionary measures particularly selecting safety place for rehabilitation, stocking essential medicines and arrangements for health care to both people and domestic animals, stocking materials for temporary shed and adequate arrangements for rescue and shifting affected people immediately. Besides, immediate action to be taken for restoration of transport and communication system, temporary shed for rehabilitation in the village to safe guard the assets of the affected people and taking all hygienic and sanitation measures. The people may be trained to develop their capability towards preparedness and mitigation measures.

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