

The Sound Of Hudhud

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Abstract

Andhra Pradesh is a coastal state on the East coast of India. It has been traditionally vulnerable to natural disasters on account of its unique geo-climate conditions. Naturally coastal regions prone to more effects compared to non-coastal regions. The main objective of the present study is to explore and evaluate the impact of Hudhud cyclone at three stations of coastal waters along the coast of Visakhapatnam. An attempt is made in this paper to review cyclone cause, effects, coping strategies and disaster management plan by taking Hudhud as special reference..

Keywords: *geo-climate, cause, effects, coping strategies, disaster management plan.*

reported. Hudhud has predominantly caused damages to kutcha houses and livelihoods. Chhattisgarh, adjoining east Madhya Pradesh and interior Odisha, East Uttar Pradesh, Jharkhand and Bihar has experienced rainfall. Over 300 houses were damaged and several persons were injured in Jharkhand and 5 deaths and 12 injured has been reported from Rautpur village & Wani village of Manigachi Block in Darbhanga district of Bihar. The weather system then moved northwards into Nepal, causing blizzards that lead to the death of 39 a further persons. In total the weather system lead to the deaths of at least 90 persons.

1. Introduction

Cyclone HUDHUD made landfall on the 12th of October 2014, between 12h00 and 13h00 near Vishakhapatnam with sustained wind speeds of 170-180 km/h, and gusting to 195 km/h (up to 212km/h). The intensity of cyclonic winds prevailed for 6 hours after landfall. Heavy rainfall affected west and east Godavari, Vishakhapatnam, Vizianagaram and Srikakulam of North Andhra Pradesh and Ganjam, Gajapati, Koratpur, Rayagada, Nabarangpur, Malkangiri, Kalakhandi, Phulbani districts of South Odisha. The peak storm surge took place during high tide (1.1m) and was estimated at 1.2 meters above astronomical tide, resulting in some inundation of low-lying areas of Vishakhapatnam, Vizianagaram and Srikakulam districts at the time of landfall. Chhattisgarh, adjoining east Madhya Pradesh and interior Odisha, East Uttar Pradesh, Jharkhand and Bihar have experienced rainfall as the system moved northwards and further inland. The Cyclone has caused 1) Wind storm and storm surge and 2) Heavy rain, flooding and water logging. Local authorities have estimated that up to 70% of trees in were uprooted and approximately 70% of power lines damaged in Vishakhapatnam^[5]. As of 20th October 2014, 46 deaths from Andhra Pradesh (29 in Visakhapatnam and 15 in Vizianagaram, and 2 in Srikakulam) have been

2. Pre Cyclone

The Indian Meteorological Department has warned that the sea condition along the coast of Andhra Pradesh and Orissa is likely to be very rough till Sunday and a storm surge of about 1-2 meters could inundate low-lying areas of coastal Andhra Pradesh. In Andhra Pradesh, nearly 2.75 lakh people from the four districts of Visakhapatnam, Vizianagaram, Srikakulam and East Godavari were evacuated to about 400 cyclone shelters. About 1.90 lakh people were evacuated from Srikakulam district alone, where the maximum numbers of people live close to the shore. Heavy rainfall is expected in Visakhapatnam, Vizianagaram and Srikakulam, besides East and West Godavari districts. NGOs positioned themselves in Andhra Pradesh ahead of Cyclone Hudhud, having followed the intensification of the Tropical Cyclone from the 8th of October 2014. Drawing on learning from Cyclone Phailin responses a year earlier, a joint assessment process was agreed prior to landfall, and assessment teams started moving to the field immediately after the cyclone to carry out the Joint Rapid Need Assessment (JRNA) using standardized formats and a predefined methodology. Wind speeds reached approximately 195km/h, and landfall took place near Vishakhapatnam. Initial assessment teams prioritized districts in the North of Andhra Pradesh. The

humanitarian impact of the cyclone was concentrated mostly in Vishakhapatnam district, with pockets of need in Vizianagaram and Srikakulam also.

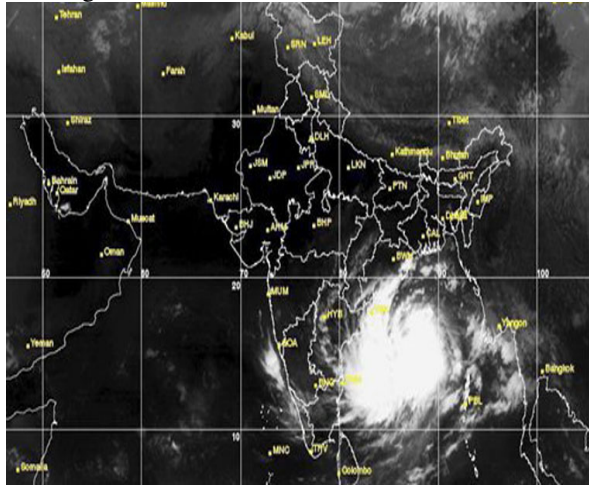


Fig.1: Origination of Cyclone

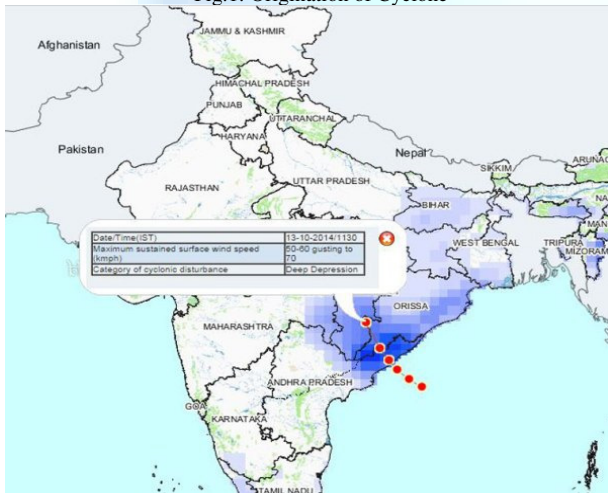


Fig.2: Movement of Cyclone (image by National Remote Sensing Agency)

3. Effects Caused:

Casualties caused were relatively less as evacuations were made before the cyclone started. But 84% of the assessed community reported that they have lost food stocks due to cyclone, out of which 34% have experienced severe damage of food stocks.^[3] Of these 39% of villages reported moderate losses, and 29% low impact. Assessment teams were concerned that community members do not have access to sufficient food especially vulnerable groups (SCs, STs, children under 5, Elders, Pregnant and lactating women) are suffering due to lack of access to sufficient daily nutritious food. 89% of the

communities reported that their remaining food stock will last for less than a week. This will result in severe food scarcity and less consumption especially by women and children. In addition, 84% of the assessed villages reported that there is significant decrease in the total amount of food that they are eating post cyclone and 98% of communities are affected by increases in food prices. In the assessed community, the impact of cyclone was most experienced by non-agriculture day labour sector- (59%) of villages affected, followed by fisher folks (52%) and then by other agriculture day labour (34%), artisans, petty shops, small scale entrepreneur (30%). 34% of villages assessed indicated that there had been severe crop damage.^[1] It was observed that there is a loss of livelihood especially cashew, coconut, pineapple, banana, tamarind plantation, sugarcane, vegetables, palm oil trees, horticulture plantations and NTF produces like coffee plantation are completely wiped out. 68% of Anganwadi centres are not affected by disasters but there is a reduction in functionality of nutrition services due to unavailability of food stocks and dry ration. 43% of the mothers reported that there is no safe and private place for breastfeeding their children who are below 6 months, which will severely affect Infant and Young Child Feeding (IYCF) practices and may result into top feeding, reducing exclusive breastfeeding. ICDS centre are not functional in the affected areas, although ICDS has been ordered to open immediately, it will take some time before becoming fully functional as all the food commodities (oil, rice, eggs etc.) has been lost/damaged. 54% of villages indicated that there were challenges relating to food preparation due to damage of cooking utensils/ loss of food stocks in the affected areas. There is a need for further nutritional assessment, as reduced availability of diverse foods, reduced consumption at the household level, and increase in market prices, poor sanitation conditions of displaced populations and loss of assets and stocks may lead to a deterioration of nutritional status. 8,742 animal deaths were reported. 16% of villages have expressed concerns over livestock and reported loss/death of their livestock. 25% of villages assessed indicated that the availability of fodder for domestic animals has been affected.

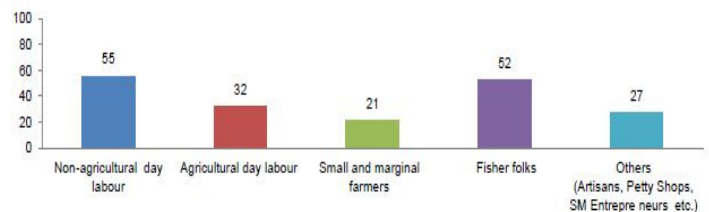


Fig.3: Impact on Various livelihoods

The overall health infrastructure and system in AP region is moderately affected. There were 11 PHCs assessed across 3 districts in A.P. and only 2 PHCs been severely affected. Only 1 ambulance had been damaged. Out of total 23 health camps organized, 19 (83%) of them got affected due to waterlogging. Equitable access to health facilities is a big concern. The lack of access to healthcare from PHC, AWC, Rural Health Providers, attributed to facilities being affected and reduced staffing levels as staff and their families themselves being affected. In almost all PHCs assessed, majority of them (96%) of the damaged portion could be restored. The total health facilities assessed is 32 and of these, 25 of them would be functional within 15 days (78%); and 5 (15%) of them would become functional within 30 days while 7% of them could become functional beyond 30 days period. There are limited underlying health concerns in population assessed except cases of malnutrition and communicable diseases in selective pockets of Srikakulam and Vishakhapatnam villages as more than 90% of the village did not have such health concerns. Health camps are concentrated in urban pockets of assessed districts, the appropriate and equitable health services not available to the rural during the time of the assessment. Health surveillance is largely missing. The organized and unorganized medical camps are not in coordination loop and information on health surveillance and utilization status is not being maintained. Poor water, sanitation and hygiene conditions are increasing health risks for spread of communicable diseases and epidemics. The appropriate measures for information and awareness of people to prevent communicable diseases are not in place. Most pregnant women deliver in the private or the Govt. Hospitals, large number of which are affected and thereby increasing the load on facilities that are operational. The routine immunization and neo born care is also under pressure in existing health facilities. SRH services, RH supplies, emergency obstetric and new-born care, prevention of gender based violence and prevention of HIV/AIDs. High incidence of UTI reported among women by Anganwadi workers. All 3 districts teams reported eye infections (maybe conjunctivitis etc.). 73% schools were used as shelters whereas 35 primary schools and 17 high schools stopped functioning due to cyclone storm in all the three assessed districts Srikakulam, Vizianagaram and Vishakhapatnam. 10% of schools lost their study material during the disaster situation^[4].



Fig.4: Tidal activity during cyclone period

4. Measures Taken by the government

As many as 320 villages in 44 mandals of Srikakulam, Visakhapatnam, Vizianagaram and East Godavari districts are affected by cyclone. Food, drinking water and other facilities are being provided at the relief camps. The National Crisis Management Committee (NCMC) met under the Chairmanship of the Cabinet Secretary Ajit Seth and reviewed the preparedness for relief and rescue operations in the wake of the cyclonic storm. Andhra Pradesh government has identified 356 villages in 59 Mandals of the four districts as cyclone-affected. More than 300 relief camps were opened. NDRF deployed 42 rescue and relief teams for rescue operations. They also cleared felled trees, electricity and communication poles and hoardings from roads in the affected areas. 500 field staff and 100 engineers are working day-and-night to restore normalcy and telecom services. 45,000 electric poles would be installed to restore power, of this, 2000 poles have reached Vizag and restoration works are being carried out. Support was also promised by the Tamil Nadu CM. The statistics revealed that 2250 km length of roads were damaged in the state. Andhra Pradesh State Road Transport Corporation (APSRTC) said in a release that bus services to Visakhapatnam have been restored. The armed forces assisted the civil administration on rescue and relief operations, deploying four teams to Vishakhapatnam 4 teams to Srikakulam (Tikli and Echerla). The Army established a Disaster Management Cell at Air Defence College, Gopalpur. Six helicopters have been positioned in the naval base at Visakhapatnam. A P-8I long-range maritime reconnaissance aircraft based at INS Rajali in Arakkonam was used to carry out damage assessment of coastal areas. The Navy was appointed as the lead agency among the armed forces for relief and response operations that was code-named 'Op Lehar'. Five diving teams dispatched to Srikakulam, 10 teams to low-lying areas in

and around Vishakhapatnam for rescue and relief operations. 15 satellite phones are arranged and 689 swimmers are positioned across 5 districts. 54 boats have been kept ready (30 of them are naval boats). Government constituted special teams to identify the affected families and enumerate the losses for further assistance. (15th October) The East Coast Railway and South Central Railway cancelled over 70 trains while short terminating or diverting many others in view of cyclonic storm Hudhud. The PM announced Rs 1,000 Crore worth of aid for the cyclone-affected areas in Andhra Pradesh by the Centre. Aid of Rs 500,000 will be given to kin of deceased and Rs 50,000 will be given to the injured along with a provision of 25 kg rice, 1 kg sugar and 5 litres of kerosene. The government has announced (as per GO MS 9) 50 kgs of rice, 5 kgs of kerosene, 2 kgs of dal, 1 kg sugar, ½ kg red chilli powder, 1kg tamarind, ½ kg salt, 2 kgs potato and 3kgs onion for fishing communities. For other affected communities the relief is reduced to 25 kgs of rice. Andhra Pradesh has formed five special teams to monitor health, restoration, relief, power and sanitation.

5. Recommendations

Focus on children under 5, pregnant women, lactating mothers, elderly and persons with disability, with UCT distribution to the vulnerable groups. Support to marginal groups and labourers working on agriculture or fishing. Advocacy and coordination with ICDS and MDM program to continue providing the food as per the calendar. Food assistance, Cash Transfers to support food assistance strategy, as markets are likely to recovery quickly. Clearance of Debris could be carried out under CFW. Safe Water provisioning such as filtration, treatment, storage & handling should be provided.

4. Conclusions

Though there are a lot of measures taken by the government, there are still a lot of areas that needed renovation and development. The urban area was developed in a fast manner and renovated where as the rural areas lacked access of many of the facilities that they need.

References

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