

# Cyclone Fani

(3<sup>rd</sup> May 2019, Odisha, India)



Aftermath of Cyclone FANI, Source: The Hindu, Date: 6<sup>th</sup> May, 2019.

Submitted to

**GADRI**

By

**Ms. Payal Nayak,**

Assistant Professor

School of Climate and Disaster Studies (SCDS)



Centurion University of Technology and Management  
Ramachandrapur, PO: Jatni, Khordha, 752050, Odisha, India

<http://www.cutm.ac.in>

24<sup>th</sup> May 2019

## 1. Context

The current report briefly describes the immediate impact of very severe tropical cyclone, named 'Fani', that made landfall at 8.12 AM on 3<sup>rd</sup> May 2019 at Puri, Odisha, East Coast of India. The Category 4 cyclone had an estimated maximum sustained surface wind speed of 175-185 km/hr, gusting to 210 km/hr. Along the path it moved through the densely populated coastal Odisha, affecting 16.5 million in 14 districts, with severe destruction of life and property in the districts of Puri, Khurdha, Cuttack, Jagatsinghpur and Kendrapara.



Fani evolved from a depression in Indian Ocean, on the west of Sumatra on 26<sup>th</sup> April 2019. It maintained its intensity after crossing the sea, even after an interaction with land, and did not cause heavy rainfall. Its track remained closer to Odisha coast during its lifespan of 11 days, in the sea and land put together.

Satellite image of Fani intensifying in the Bay of Bengal (National Oceanic and Atmospheric Administration, 1<sup>st</sup> May 2019).  
Source: Dhaka Tribune, Date: 2<sup>nd</sup> May, 2019

## 2. Pre-Cyclone Initiatives

Till 27<sup>th</sup> of May, 2019, the Indian Meteorological Department (IMD) did not predict any major impact on Odisha. However, The Joint Typhoon Warning Center (JTWC) suggested possible impact of the cyclone on the Odisha. IMD issued warnings on 30<sup>th</sup> of May, 2019 predicting that Fani would likely move northwestwards from its position and recurve towards Odisha coast. Skymet predicted intensification of Fani while it gained latitude.

More than 1.2 million people from 14 coastal and interior districts were evacuated to 900 cyclone shelters in 24 hours creating a record history. People were informed about the cyclone and coping strategy through regular announcements in electronic, print and social media. 2.6 million text messages were sent to warn about the cyclone. Fishermen were asked to refrain from the sea from 30<sup>th</sup> April night.



Police officer requesting a resident to evacuate  
(Source: Outlook India, Date: 4<sup>th</sup> May, 2019)

## 3. Immediate Impact

In spite of such huge evacuation and communication, the state witnessed a loss of 64 precious human lives, 8 million livestock, 10 million trees, electricity, telecommunication and road infrastructure and other property.

### *Loss of Agriculture and agriculture based livelihood*

The estimated damage to standing crops has been pegged at US\$ 20 million, besides destruction of storage facilities and harvested crops. About 150,000 hectares of agricultural land has been affected by the cyclone. About 30,000 hectares of horticulture land with perennial crops such as mango, cashew, coconut and betel vine have been affected. These crops are relatively more valuable and were still standing in the field when the cyclone hit. Infrastructure used for floriculture, such as greenhouses, drip irrigation and sprinkler systems, have also taken a heavy hit.



Ripped off coconut farms in Puri District.  
Source: New Indian Express, Date: 10<sup>th</sup> May, 2019.

### *Loss of non-farm livelihood*

The cyclone has also destroyed the livelihood of craftsmen, who depended on natural products such as coir (for handicraft) and natural dyes (for painting) derived from trees. Tourism has got major blow. Over 600 hotels buzzing with tourists during summer days are mostly unoccupied. At the same time in previous year, 129 hotels in Puri had accounted for 84,000 summer tourists. The debris, damaged hotels and electricity infrastructure has brought down tourists to almost nil in the city. As far as fishermen are concerned their livelihood has gone due to loss of boats and fishing equipment.

### *Loss of infrastructure*

The Odisha government has estimated Fani induced physical infrastructure loss at US\$ 1700 million. It includes half a million houses, roads, culverts, electricity poles and wires, street lights, drains, community centers, town halls, parks, etc. 200,000 electric poles, 5030 km of 33 kV lines, 38613 km of 11 kV lines, 79485 km of low tension lines and 64304 distribution transformers are reportedly damaged. 2000 telecommunication towers have been damaged. (Hindu, 15<sup>th</sup> May, 2019).



Aftermath of Cyclone, Devastation of electrical infrastructure  
Source: Outlook India, Date: 7<sup>th</sup> May, 2019.

## **4. Relief and Restoration Initiatives**

44 teams of National Disaster Response Force, 20 teams of Odisha Disaster Rapid Action Force, 525 teams of Fire Services and 8 teams of Odisha Forest Development Corporation were deployed for search and rescue, tree cutting and road clearance in the affected areas.

200 gang men from Andhra Pradesh and 50 each from Telangana and West Bengal were engaged in the restoration of the electric poles. Heavy duty generators were engaged by Public Works Department to supply drinking water, since water storage and treatment facilities were majorly hit due to uprooting of trees.



Relief Distribution at Nimapada Block, Puri District  
Source: Payal Nayak, CUTM, Date:17<sup>th</sup> of May, 2019.

Because of devastated telephone towers, HAM radio and satellite phones, were used to communicate with district headquarters. As relief measures for affected populations, rolls of polythene, food items, and survival kits were distributed by the state, market and civil society organisations.

## **5. Concluding Remarks**

The state of Odisha, on the eastern seaboard of India, with 480 km of coastline, 11 major river systems and the geo-climatic conditions is vulnerable to different disasters such as floods, cyclones, droughts and heat waves. It has been witnessing a growing intensity of frequent disasters over the past 50 years.

The 'zero casualty' policy of the country has been driving the state's disaster management strategy and it has done a commendable job in issuing early warnings and evacuations of vulnerable people.

However, there is a need to strengthen its post-disaster restoration and rehabilitation strategies. It can be strengthened through building of strong community based institutions and developing robust linkages with government departments. While the pre-disaster operations are mostly centralized due to the nature of its interventions requiring prompt actions, rehabilitation and restoration lacked considerable state and civil society partnership. It was reported that food relief was not received by some areas even after 48 hours and the communities and civil society agencies came forward to fill the gap. These groups have the potential to supplement the humungous task of relief and restoration during and post-disasters, because of their proximity, local knowledge and voluntary spirit.

Finally, there is a large need to develop context specific knowledge, and affordable disaster resilient technology and infrastructure to deal with the frequent occurring of cyclones in this economically backward coastal state in the long run, if it has to come out of the vicious cycle of disaster and economic underdevelopment.

## Reference

IAGO (2019), Cyclone FANI - Joint Rapid Needs Assessment Report, In The Aftermath Of Cyclone Fani In Odisha-May 2019. (Unpublished)

<https://indianexpress.com/article/explained/simply-put-why-fani-is-an-unusual-cyclonic-storm-5705562/>

<https://indianexpress.com/article/india/cyclone-fani-odisha-kolkata-andhra-pradesh-5709800/>

<https://www.ndtv.com/india-news/odisha-government-says-cyclone-fani-caused-rs-525-crore-infrastructure-damage-2037725>

<https://www.news18.com/news/india/cyclone-fani-has-snatched-our-livelihood-taken-us-20-years-behind-say-chilika-fishermen-2150891.html>

<https://www.news18.com/news/india/cyclone-fani-has-snatched-our-livelihood-taken-us-20-years-behind-say-chilika-fishermen-2150891.html>

<https://economictimes.indiatimes.com/news/politics-and-nation/cyclone-fani-six-things-you-should-know/articleshow/69151302.cms>

<https://www.thestatesman.com/india/fani-lifespan-longest-among-tropical-cyclones-bay-bengal-1502755176.html>

<http://www.newindianexpress.com/nation/2019/may/03/lighting-kills-8-in-uttar-pradesh-1972176.html>

<https://www.dhakatribune.com/around-the-web/2019/05/02/how-cyclone-fani-got-its-name>

<https://thewire.in/environment/cyclone-fani-death-toll-in-odisha-rises-to-64>