

## **Lessons from Fani Cyclone - Climate-risked World**

### **What is the issue?**

- A horrific tropical cyclone Fani made landfall in Odisha recently. Click [here](#) to know more.
- It is imperative at this juncture to understand the increasingly climate-risked world that Fani indicated.

### **What was Fani's impact?**

- Cyclone Fani left behind a trail of broken homes, powerlines and infrastructure.
- Odisha has lost years of its development dividend in one shock.
- Nevertheless, the fact that there were far fewer fatalities in this cyclone than before is to be acknowledged.
- Even when wind speeds crossed 170 km/hour and reached 204 km/hour, the loss of human life was contained at 41 (reportedly increased to 70).
- In contrast, the state had lost 10,000 people in the super cyclone of 1999.

### **What is the climate change factor here?**

- The 2018 climate assessment by the World Meteorological Organization (WMO) gives some inputs in this regard.
- Tropical storms in the Northern Hemisphere were up, from 63 in the previous year to 74 in 2018.
- They were roughly the same, 22, in the Southern Hemisphere.
- The fact is that there is a big difference in these storms, as the India Meteorological Department (IMD) is finding.
- The recent storms are being increasingly and crazily unpredictable.
- In recent years, the IMD has nearly perfected the science of cyclone forecast.
- But now it is learning, in real time, to change its methods and to advance its technology.

### **What is the recent evidence to this?**

- Ockhi which hit the Kerala coast in late 2017 took many lives and caught fishermen at sea unawares. Click [here](#) to know more.
- Ockhi went from a deep depression in the ocean to a cyclonic storm in a matter of just 6 hours.

- The failure to predict and warn was not just human, but because of the unnatural characteristics of such a tropical storm.
- It changed direction; it gathered steam when least expected and became more intense and more virulent at speeds never seen before.
- One reason was the intense heat pockets in the ocean, which changed the direction and speed of the cyclone.

### What was the case with Fani?

- As the IMD was prepared for such changes, it used even more sophisticated equipment and improved the prediction models in Fani.
- But the speed of change was so rapid that the learning of 2017 from Ockhi became outdated.
- **Intensity** - Fani intensified from severe to very severe in no time.
- **Landfall** - Fani also made landfall ahead of its schedule.
- It was to hit Odisha by the afternoon; in real time, this meant evacuations should have been completed by then.
- But Fani landed with ferocity by the morning itself.
- The fact that the state administration had planned and managed to move people ahead of schedule speaks volumes for the preparedness.
- **Inland** - Fani moved inland and reached Bhubaneswar.
- But notably, it did not weaken in its wind speed there, as should have been the usual case.
- This was strange because storms need moisture on land to gather intensity and to lash the land with rain.
- But it was peak summer, a time when ocean storms never hit in any case.
- It is still unclear why it moved inland and how should this be predicted in the future.
- In all, Fani demands that India invest in the science of weather and in the governance capacity to move rapidly to avert disasters.
- The future is even more risked and even more unpredictable than imagined.

**Source: Business Standard**