Lessons Cyclones Teach

There is much that still remains to be understood about disaster management.

It is too early to resort to self-congratulation. Just because this time around, early warning systems kicked in and over nine lakh people were evacuated to shelters before tropical cyclone Phailin hit the coasts of Andhra Pradesh and Odisha on 12 October, one cannot assume that finally, crucial lessons in disaster management have been learnt in India. While it is true that the local administration and the state governments in Odisha and Andhra Pradesh did respond by the book, and had put in place basic infrastructure such as cyclone shelters to deal with the crisis, this still remains the exception and not the rule. One only has to recall what happened in Uttarakhand in June when torrential rain and flash floods swept away villages and killed an estimated 580 people (although over 5,000 are still "missing"). In that instance too, as this time, the meteorological department had prior information of unusually heavy rains. Yet no action was taken to prevent pilgrims from venturing into areas that are known to be prone to flash floods and landslides. Instead, the administration rushed around trying to cope with a disaster that brutally exposed its lack of preparedness.

Disaster management began to be taken seriously in India only after the 2004 tsunami hit its coasts leaving in its wake widespread destruction and death. In 2005, the Disaster Management Act was brought in, leading to the creation of a National Disaster Management Authority (NDMA) in 2006, headed by the prime minister. Each state was also required to have a similar authority. In addition, a National Disaster Response Force (NDRF) was created to assist state governments dealing with a natural disaster. In fact, if you read the documents explaining India's disaster response system, you would find little that is wrong with it.

India is one of the most disaster-prone areas in the world with 60% of its landmass prone to earthquakes, 40 million hectares vulnerable to flooding, 8% of its land area exposed to cyclones and 68% of the land liable to be affected by drought. Despite this, the NDMA has not yet prepared a vulnerability atlas that maps all such areas in specific detail so that steps to mitigate natural calamities can be put in place before disaster strikes.

Possibly the very idea of a "national" disaster management agency is a problem because it tends to make state governments take their own responsibility less seriously. Yet, as is evident from the example of Odisha, the key people when disasters strike are district administrators and only after that state and central government personnel. Preparedness must begin at the district and even panchayat level. This is the point at which there is constant failure. Once the calamity strikes, even the most efficient "national" system cannot be adequate to deal with the disaster, given the size of this country and the logistics of reaching help to distant locations. So even if Odisha, which experienced a worse cyclone in 1999 that led to almost 10,000 deaths, has learnt some lessons and put in place response measures at the district level, this is not true for other states.

Secondly, although cyclones, earthquakes, tsunamis, or even droughts and floods cannot be averted, there are many steps to mitigate natural disasters that can be taken. With the advent of climate change, the incidence of extreme weather events will increase. The only way round is to take steps to minimise the impact of these occurrences. For example, earthquake-prone zones have to make building codes mandatory and ensure that infrastructure and other developmental works do not stress the natural fragility of the region. In all hill areas there have been gross violations of such norms, not least in the Uttarakhand.

It is also well known that the impact of cyclones and tsunamis can be checked to some extent if mangroves along the coasts are not disturbed as they act as shock absorbers. Yet, many state governments wilfully ignore this fact as they allow industrial and urban development to deliberately or "accidentally" destroy these precious natural buffers. Disaster mitigation has to be woven into developmental policy. It can never be an add-on. It is part of the approach of environmentally sustainable development. Yet, in India, there is plenty of lip service paid to these concepts, including in official government documentation, and yet policy decisions pay little heed to them. The hand wringing after a calamity does not result in a decisive change of direction in developmental policy.

And finally, the main challenge of relief and rehabilitation still remains. In Odisha alone, according to the government, over 2,00,000 houses and an equivalent number of hectares of agricultural land have been damaged. Lakhs of people have lost their means of livelihood. To get these people, whose lives were saved because of timely evacuation, on their feet again is an even more daunting task than the important emergency intervention on the night the cyclone hit the coast. So the response to the Odisha cyclone suggests that some lessons have been learnt, but to have an effective disaster management plan in place, there are many more steps that must be taken.