REINSURANCE

Has the time come for Indian CAT bonds?

Excellent management of cyclone Fani by the eastern Indian state of Odisha has become a text book example of how to manage natural catastrophes although the government is now faced with the task of post-disaster reconstruction. With low insurance penetration, the question of using capital markets as a means of risk transfer merits attention.

By Anoop Khanna

'*How Do You Save a Million People From a Cyclone? Ask a Poor State in India*' – the headline in the New York Times of 3 May 2019 was very apt.

Indeed, Odisha, a poor eastern coastal state in India, home to about 42m as per 2011 census with an average income of less than $5 a day, was battered by an extremely severe cyclonic storm Fani on 3 May 2019, but Odisha's management of the event has been hailed as a classic text-book example of how best to manage a natural disaster.

Fatalities were limited to 64 lives compared to just two decades ago, when the super cyclone 05B of Odisha, resulted in a loss of 10,000 lives and $2.5bn in damages.

Better preparedness helped contain the catastrophic impact

Learning from the 1999 super cyclone, Odisha adopted every possible strategy to be better prepared for future cyclones. The government's 'zero casualty' policy for natural disasters and near accuracy of Indian meteorological department's early warning system helped greatly to reduce the death toll in cyclone Fani.

Around 14m people were affected by cyclone Fani, and a record 1.39m people were evacuated in less than 48 hours to safe shelters. Almost 15,000 kitchens catering to 9000 evacuation shelters were made functional overnight. This mammoth evacuation exercise involved more than 45,000 volunteers.

The United Nations Office for Disaster Risk Reduction (UNISDR) and other organisations have praised government and volunteer efforts that ensured the extent of destruction be kept to a minimum.

The full assessment of the trail of destruction left behind by cyclone Fani, which uprooted thousands of trees and damaged public buildings and other infrastructure, will take some time. But half a million people have lost their homes and these would have to be re-constructed.

Low insurance penetration

Odisha would require at least $14bn to rebuild the damaged houses and public infrastructure. Most of it would have to come from government resources as insurance penetration in Odisha is quite low.

Insurance companies are not likely

to incur major losses for cyclone Fani, as most of the properties of the middle and lower strata of the society are usually not insured.

An assessment by an Indian public sector general insurance company has put the insurance claims arising from cyclone Fani at approximately INR35bn ($500m). As the cyclone was a brief one, the damages may also not go up much further and the majority of claims are expected to come from crop, property and motor insurance.

All good intentions notwithstanding, no government can set aside adequate amounts for managing the aftermath of natural calamities.

– Mr Kirill K Savrassov

Several major Nat CAT events have ravaged India

In the last decade, India has seen quite a few natural catastrophic events. Last year, the southern coastal Indian state of Kerala suffered an estimated economic loss of $4.5bn due to catastrophic floods in August.

The states of Andhra Pradesh and Odisha were ravaged by cyclones Phailin and Hud Hud in October 2013 and September 2014 respectively.

Flash floods and landslides in June 2013 devastated the northern states of Himachal Pradesh and Uttarakhand; and the Chennai floods of December 2015.

According to research from Lloyd's and the Centre for Economics and Business Research, India was found to have an insurance penetration rate of less than 1% with the absolute cost of the insurance gap standing at $27bn.

UNISDR Report places India in the top five that suffer largest losses from disasters

A report published by the United Nations Office for Disaster Risk Reduction (UNISDR) in October 2018 indicates that India lost $79.5bn to natural disasters from 1998 to 2017.

The report jointly prepared by UNISDR and the Centre for Research on the Epidemiology of Disasters and titled "Report on Economic Losses, Poverty and Disasters for 1998-2017", ranks India among the top five countries in the world with the largest losses from disasters.

Human cost of disasters

Rebuilding and rehabilitation after disaster and destruction on such a large scale needs huge amounts and in the absence of adequate insurance protection in place, post disaster reconstruction activities do begin with the initial aid and support from the federal government but somewhere down the line, things go awry and the worst sufferers are the poor and lower strata of society.

All good intentions notwithstanding, no government can set aside adequate amounts for managing the aftermath of natural calamities.

Phoenix CRetro Reinsurance chief executive Kirill K Savrassov told *Asia Insurance Review*, "The human cost of natural disasters is not just measured in the deaths and injuries that they cause, but also in terms of their lasting economic impact on survivors and countries.

"When disaster strikes, immediate steps must be taken to protect survivors and provide them with the basic support and services. In the medium and long term, homes will need to be rebuilt, places of employment reconstructed and infrastructure of the area re-established. If there is to be a solution that benefits everyone, it is likely that the solution will have to be organised by the government, whether on a national or local level."

Exposure of infrastructure is common

Mr Savrassov said, "With different levels of insurance penetration and market development, all large countries have something in common - exposure of critical infrastructure to various natural catastrophes.

"Also because of their geographical expanse, countries like the US, India or Russia obviously have some or many of their areas geographically positioned in 'peak zones', so almost anytime could face a sudden, devastating hit that could adversely affect overall economic development."

"This wide exposure and the enormous insurance protection gap, especially in countries like India and Russia, plays havoc with their economies," said Mr Savrassov.

No country is better off

It is not that developed countries like the US that have satisfactory levels of insurance penetration are any better off. Interestingly in 2012, when superstorm Sandy hit the north eastern parts of the United States, only 50% of economic losses were covered by insurance.

Mr Savrassov said, "The increase in frequency and severity of natural catastrophes due to climate change and the relatively weak macro level role for insurance yet, countries have to find a wider and better solution how to protect themselves and secure their long-term stability."

He said this solution can be achieved by "transfer of risk to the capital markets on the sovereign or sub-sovereign (state) level by issuance of catastrophe bonds."

Time is right to take Indian CAT risks to the capital markets

Mr Savrassov said, "Definitely for India, the time has come to pay attention to the potential transfer of large catastrophe risks to capital markets and lead the way for the entire Asia. India can identify its most exposed areas and arrange a proper peak protection for them.

Sponsoring catastrophe bonds, including ones that use parametric triggers, could become one of the most effective risk transfer instruments to address the issue of the protection gap and eliminate the problem of underinsurance.