

Research Note

Typhoon Haiyan and Disaster Preparedness

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Abstract: Typhoon Phailin has impacted the Philippines in a way that is sure to change its course of history. In this paper we look at some of the reasons and understand why the impact of such disasters is felt more in remote areas and what can be done to ensure that locals and governments are better prepared and equipped to administer and take charge of these situations by building mitigation, preparedness, response and recovery strategies as disasters can't be prevented, but can be effectively managed.

Introduction

Typhoon Haiyan has been one of the most devastating and deadliest storms to have hit in recent times that caused massive destruction and affected around 11 million people in South East Asia, unofficially making it the fourth strongest storm ever recorded. While the Philippines government issued evacuation alerts, it still wasn't enough and around 5600 lives were lost. In the aftermath of the storm there has been severe criticism to the government's response in slow relief efforts, search and rescue program, and its inability to control looting and provide protection to women who were especially vulnerable during this time.

The *2010 Asia Pacific Disaster Report* released last week says that people in the Asia Pacific region are four times more likely to be affected by natural catastrophes than those in Africa and 25 times more likely than those in North America or Europe¹. Despite these reports that clearly indicate that the region is at a high risk, not many disaster preparedness or crisis management initiatives have been set up that address building resiliency and control the impact of such disasters. The measures are especially lacking in early warning and evacuation systems, disaster risk awareness and local disaster management capacities².

It is essential to note that developing countries suffer more than 95 per cent of all deaths caused by natural disasters as their high population densities and poor infrastructure, coupled with unstable landforms and exposure to severe weather events, makes them particularly vulnerable³.

In order to identify systemic gaps and understand precisely what went wrong and how it can be fixed we will look into some important aspects that if met can help develop an effective disaster management cycle.

Technical equipment too difficult to acquire

Remote sensing equipment is expensive and costly to implement. Governments in developing countries have to often rely on international support and reporting to equip themselves with preparedness measures which sometimes can cause delay in evacuation procedures and accumulation of relief goods. This equipment provides long term climate modelling and early learning that can help countries monitor and evaluate and develop response strategies such as identifying escape routes, crisis mapping, cyclone monitoring, and storm surge predictions⁴.

But equal access to these technologies is still an issue and cost is huge barrier. The UN Economic Commission for Africa (UN ECA) argues that having timely access to remote sensing data is a powerful tool for regional sustainable development⁵. Several initiatives have been formed to overcome this barrier. Authorized users can call the International Charter on Space or Major Disaster to request information and acquire imagery over the affected area⁶.

Inefficient Operations due to lack of training

Lack of training in disaster and crisis management is one of the main causes that Typhoon Haiyan was able to wreak havoc of such magnitude. While first responders and relief workers are deployed to take control of situation in wake of such disaster, government could also provide training programs to locals who live in storm susceptible areas. What people do before a disaster can make a dramatic difference in their ability to cope with and recover from a disaster, as well as their ability to protect other household members and family possessions from avoidable losses⁷. Ability to decipher warning signs, following evacuation orders, and stocking up with necessary food supplies are some of the preventative measures citizens can take to protect themselves from such disasters.

Typhoon Haiyan demonstrated how locals distrust in the government made them repeatedly ignore evacuations orders. It is the responsibility of citizens to follow procedures and take warning signs seriously and this trust and knowledge can only be entrusted by government officials.

Coping with Disasters without International Support Preparedness

International support is extremely important in coping up with disasters, in terms of additional funding, relief supplies and

emergency responders and medical camps. But by the time this support arrives, it is sometimes too late and the damage is already been done. Therefore it is the responsibility of the local administration such as rural hospitals, providers and emergency medical services who will be critical first responders in the event of natural disasters, and they should be equipped with the supplies, training and infrastructure alternatives to protect and safeguard evacuees. Coping without international support can be challenging and requires advance planning and strategy to build a sustainable framework. Being able to mount relief operations and begin disaster recovery is all the more important after the storm has caused devastation. Providing food, shelter, medications, water to victims is an ongoing operation and important in terms of limiting casualties. The Philippine government was slow to respond in its relief work and many casualties were witnessed as a result in the aftermath of typhoon Haiyan.

Lack of scientific basis for pre-positioning

Prepositioning of goods before disaster strikes always helps in coping up with the situation and enhancing the relief work. It also saves a lot of money that is spent otherwise in logistics, transportation and personnel after the event has occurred. Pre-positioning relief items in areas vulnerable to natural disaster can save lives, particularly in

remote areas. Buying and storing supplies locally brings economic benefits to communities, builds resilience, and means emergency assistance can be delivered at maximum speed and minimum cost⁸. In the aftermath of the crisis having fewer supplies available leads to cost hikes from suppliers, with the government bargaining to procure items. Governments need to allocate substantial money for a crisis management plan that includes a pre-positioning model to save goods and relief items. Many non-profits agencies are participating in these programs and governments of areas that are prone to frequent disasters should consider collaborating with them and build strategies around it to be better prepared when a disaster strikes again.

Previous Disaster Experience and its role in future preparedness

Previous disaster experience is helpful in coping with future disasters. A case in point is Hurricane Sandy that struck the US East Coast in November 2012. Authorities were well prepared in advance with evacuations of the low lying areas being mandatory and coasts were secured with surge barriers and sea gates. The government had learnt its lesson from Hurricane Katrina back in 2006 and did not want to see a repeat of it.

Cyclone Phailin that struck the eastern coast of India was a Category Five tropical storm that may have affected as many as 12 million people⁹. This cyclone prompted India's biggest evacuation and more than 900, 000 people were moved away from the coastlines to cyclone shelters. Though it was a very severe storm there were no major casualties reported and the cyclone exited in due course of time. The Indian government's preparedness and effectiveness in carrying out the evacuation and relief work was highly appreciated and averted what could otherwise would have been a severe tragedy. But India has seen its fair share of natural disasters most recent being the North India Flash floods that left around 10,000 people trapped in the Himalayan valley. The government was ill-equipped and not prepared at all to deal with the crisis and as a result suffered lot of negative reactions from media and countrymen. This prompted them to take charge in advance and implement emergency procedures when Cyclone Phailin made landfall and the results are there for everyone to see.

These cases point to the fact that governments can and should leverage previous disaster experience to avert tragedies and build safety procedures. Governments can conduct root cause analysis of the actual events and use these experiences to understand lessons learnt, what needs to be done and what went wrong.

Conclusion

The saying that “prevention is better than cure” can’t be truer in case of disasters that change our lives forever. While many disaster recovery strategies can be put in place to monitor the impact and prevent from such events, sometimes it’s just not enough. Areas that are especially prone to disasters should consider whether it’s worth re-building every time. Climate change definitely has had its impact on the frequency of disasters that are occurring every now and then. Keeping in mind these factors governments should seriously monitor these areas and prohibit construction to safeguard its citizens by relocating them and compensating them to build a safer lives for themselves. While it’s never easy to leave your house and very existence behind and probably easier said than done, it’s important to live a safe life and reduce the risk associated with building unsafe places.

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