

When crises converge

Responding to natural disasters in South Asia during Covid-19

South Asia has been severely impacted by COVID-19 – with more than 20,000 deaths, around one million confirmed cases, and many millions of workers unemployed. The pandemic and the need for social distancing have also constrained the responses to cyclones, floods and other climate-related disasters. Nevertheless, the pandemic also brings opportunities – for directing economic stimulus packages towards investments in disaster-resilient infrastructure and services that will support a greener and more productive future.¹

COVID-19 has swept the globe. As of June 2020, it had infected more than 11 million people, and killed around 533,000. South Asia accounted for around 8.5 per cent of confirmed cases and 4.2 per cent of the deaths. And the economic fallout arising from lockdowns and social distancing has pushed the sub-region's economies into recession.

From March 2020, governments across South Asia imposed national lockdowns and other stringent measures to contain the spread of the pandemic and save lives. But this also disrupted supply chains and caused sudden drops in demand, pushing national economies into recessionary spirals. In South Asia, COVID-19-related measures could drive more than 130 million people into extreme poverty.

Converging crises

At the same time, families struggling to cope with COVID-19 remain exposed to climate-related disasters. In May 2020 India and Bangladesh were struck by Amphan – the most powerful cyclone in 20 years, which claimed over 100 lives and destroyed the homes and livelihoods of thousands of families. Then in June, cyclone Nisarga hit the west coast of India. In addition, during the spring there had been swarms of desert locusts in South-West Asia. And in June there were floods in the Indian state of Assam.

Climate-related disasters have different risk pathways from COVID-19, but they can intersect and converge with the pandemic in complex and destructive ways. Many communities are exposed to both, and the long-term consequences can be similar – damage to people's health and livelihoods and their prospects of escaping poverty.

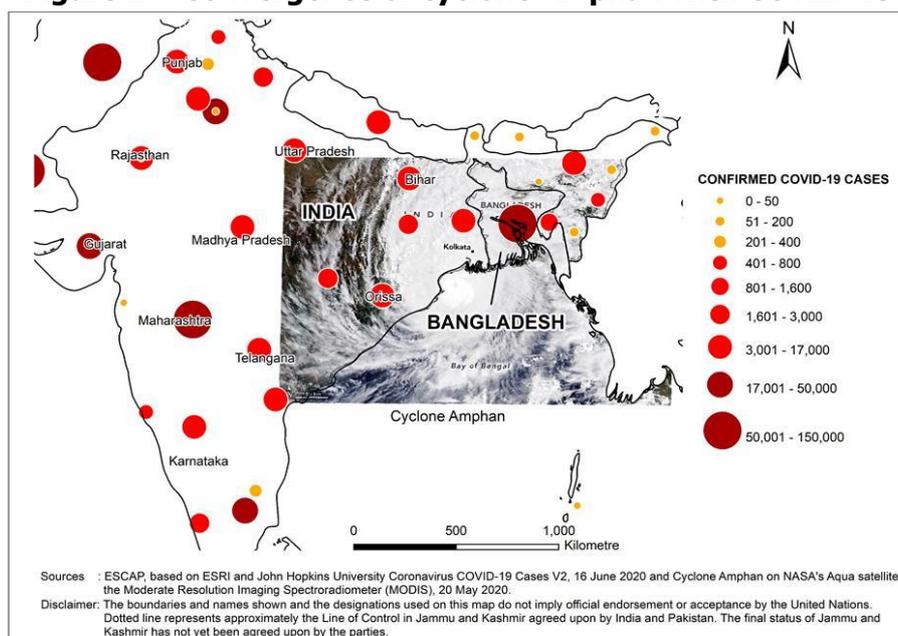
How can governments respond to these cascading and converging crises? Faced with the pandemic, many countries declared states of emergency that closed schools, offices, places of worship and restaurants and locked down other public places. Many activities and business subsequently restarted but with limitations on activities that involve physical contacts or movements of people. These restrictions have also applied to disaster response measures which have also needed to ensure social distancing.

¹ This policy brief is prepared from the ESCAP's policy study, *Protecting the most vulnerable to cascading risks from climate extremes and the COVID-19 in South Asia*, Available at <https://www.unescap.org/resources/asia-pacific-disaster-resilience-network-protecting-most-vulnerable-cascading-risks>. Peter Stalker provided technical editing.

Disaster experiences during COVID-19

The new demands of COVID-19 during disaster responses were evident in May 2020 during cyclone Amphan which hit densely populated low-lying coastal areas of Odisha, West Bengal in India, and adjoining Bangladesh. The convergence of these two crises is illustrated in Figure 1 which indicates that the largest number of confirmed COVID-19 cases was in Bangladesh.

Figure 1 – Convergence of cyclone Amphan with COVID-19



A major issue was that the typical evacuation such as cyclone shelters, community buildings and schools, had been converted to quarantine facilities – housing people who had returned home from cities and states during the lockdown periods and were undergoing mandatory quarantine processes.

Local authorities adapted according to the risks of infection. Where the risk of COVID-19 transmission was high but the threat from the cyclone was lower, they only allowed shelters to be half full in order to facilitate social distancing. In areas with highest exposure to the cyclone, they operated shelters at full capacity but took all possible preventative measures. These large-scale evacuations in the path of the cyclone were relied on impact-based, risk-informed early-warning systems and will have saved thousands of lives. Unavoidably these measures will also have increased the risk of infection. In India it was reported that 59 members of the National Disaster Response Force and 170 personnel who fought against cyclone Amphan tested COVID-19-positive.

There were similar issues in June when cyclone Nisarga struck densely populated areas on the west coast of India – where COVID-19 was already spreading fast. Here again, precise early warning followed by large-scale evacuations undoubtedly saved lives. However, COVID-19 infections accelerated: between May and June 2020 the number of confirmed cases in India rose from 100,000 to 440,000. There is no scientific evidence that disaster-related disruptions in social distancing increased the number of infections, but they will certainly have played a part.

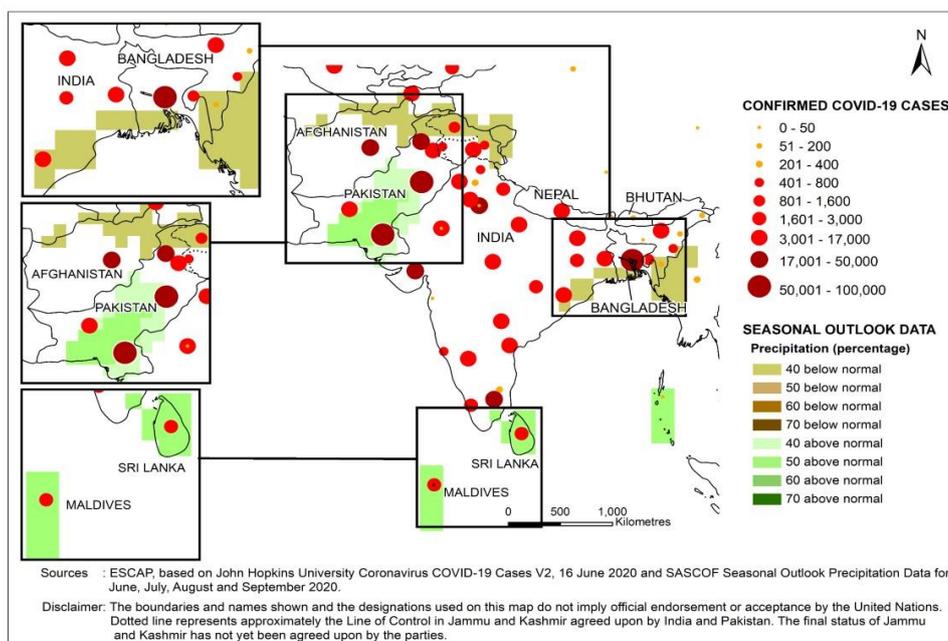
Policies for disaster response during COVID-19

In dealing with any disaster the overall imperative remains the same – to identify those at greatest risk, and protect the lives and livelihoods of the most vulnerable. Knowledge acquired from decades of disaster response, combined with the experience gained during this pandemic suggests the following policies:

1. Identify the hotspots

The starting point for disaster response is to understand the risk profiles and identify the hotspots where climate disasters and the pandemic are likely to converge. In South Asia, the most immediate concern must be the monsoon season of June to September. Water-related disasters, either floods or droughts, generally align with rainfall patterns so the seasonal outlook data can then be mapped with the distribution of COVID-19 cases. For the sub-region as a whole the results of this exercise are shown in Figure 2

Figure 2 – COVID-19 hotspots and high probability of climate-related disasters



Floods – During the 2020 monsoon the flood risks will be greatest in central and southern Pakistan, Sri Lanka and Maldives. Particular attention will be needed in central and southern Pakistan where in June 2020 there were 132,600 confirmed cases of COVID-19. This includes Karachi, which is also at high risk of flooding.

Droughts – During this monsoon season, precipitation is likely to be below normal in Afghanistan and southern Bangladesh – which are high-risk areas for drought. In Afghanistan, around 20 per cent of the population, over eight million people, are exposed to the convergence of COVID-19 and drought. In Bangladesh, 12 per cent of the population, 20 million people, are exposed to the dual risk.

These hotspots indications are based on preliminary assessments, so public officials will also need to update them regularly based on climate conditions and the evolution of the pandemic.

2. Ensure early warning for early action

Faced with the impending and converging of disasters, officials will need to prepare accordingly. For this purpose, it will be useful to create a composite risk matrix that takes into account the risk of disaster, and its potential impact, along with the extent of COVID-19 infections to place districts or areas into the appropriate zones (Figure 3). Intelligent risk analytics can be used for managing distancing in evacuation shelters.

Figure 3 – A disaster risk matrix

Likelihood	High				
	Med				
	Low				
	Very low				
		Very low	Low	Med	High
		Impact			

Source: UK Met Office

3. Invest in resilient infrastructure

The main climate-related disasters in South Asia are droughts and floods which particularly affect the poorest people who live on the most marginal land, whether in cities or rural areas. While COVID-19 has complicated many activities, it has also opened up opportunities. To promote employment and economic growth governments around the world have announced large fiscal stimuluses. These funds can be invested in climate proofing land use and water resource management. For example, in India the Mahatma Gandhi National Rural Employment Guarantee scheme, which has around 80 million participants, carried out works on irrigation, afforestation, soil and water conservation, flood protection and watershed development – and in many cases adopting nature-based solutions.

4. Customize local solutions

In a rapidly changing COVID-19 environment it is also important to adapt quickly according to the circumstances. For evacuations during cyclones or floods, for example, local officials will need to take into account the risks of transmission when arranging evacuations or shelters. Governments can also assess the local impact on food supplies. During droughts, COVID-19 will reduce the labour force and so diminish food supplies, but at the same time also disrupt agricultural markets – making it more difficult for farmers to find consumers for their produce. To address these issues the Republic of Korea, for instance, facilitated electronic commerce and ‘drive through’ agricultural markets.

5. Offer universal social protection

COVID-19, both on its own and during other disasters has undermined family-based systems of social protection particularly for the hundreds of millions of migrant laborers who are far from home, and many other daily wage earners and informal sector workers. Moreover, lockdowns and the requirements for social distancing can heighten social isolation.

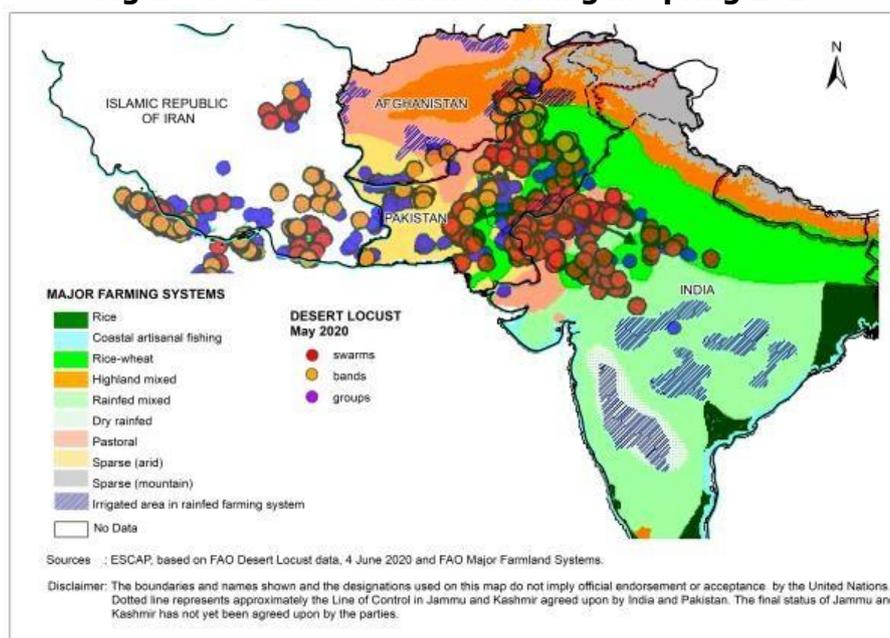
This underlines the important of social protection. In the immediate term, South Asian governments can rapidly scale up existing programmes. Once the pandemic has abated however, they will need to build on these national programmes to create universal systems of social protection that can support vulnerable populations and enhance their capacities to manage, mitigate and overcome shocks.

6. Capitalize on regional cooperation

Disasters of all kinds in South Asia typically span national borders. This was the case in the two recent cyclones for which regional cooperation through the WMO/ ESCAP Panel on Tropical Cyclones facilitated sharing of timely and accurate early warnings, which helped save thousands of lives.

Another transboundary threat is locust swarms. In 2020 these formed in the spring breeding areas and migrated east to the Indo-Pakistan border and beyond. In both India and Pakistan, locusts threaten food security and livelihoods, particularly rice-wheat farm systems (Figure 4). This year's more extensive swarms may have been caused by abnormal weather conditions, but the impact may also have been greater because COVID-19 lockdowns constrained some of the usual measures of containment.

Figure 4 – Locust swarms forming in Spring 2020





This highlights the need for greater regional cooperation. Given the range of disasters this requires a multi-hazard approach which could be pursued through the Asia-Pacific Disaster Resilience Network. Another critical initiative is the proposed South Asia Hydromet Forum (SAHF). In December 2019, the South Asia Forum on the Sustainable Development Goals concluded that SAHF should develop an action plan to enhance resilience to disasters and climate change.

To widen the opportunities for cooperation, ESCAP has also organized a series of webinars on lessons from the COVID-19 pandemic. These are arranged jointly with the SAARC Disaster Management Centre, India's National Institute of Disaster Management, and the Government of India – building resilience to cascading disasters through regional cooperation in South Asia in July 2020.

7. Building a green and resilient recovery

South Asian countries are committed to the Sustainable Development Goals by 2030, and to ensuring that 'no one is left behind'. These goals will remain out of reach, however, unless governments take every opportunity for breaking the vicious circle of poverty, inequalities and disasters – and do so while confronting COVID-19 and future biological emergencies. Rather than simply addressing disaster or virus impacts governments therefore will need to take a more coherent approach working with partners at local, national and regional levels to reduce disaster vulnerabilities and minimize systemic risks while ensuring a green and low-carbon recovery.