ACT

ACTION ON CLIMATE TODAY

This briefing looks at how disaster risk financing in developing countries is changing and why this is particularly relevant for South Asia. Across the region, disasters are becoming both more frequent and more intense; this is linked in part to the impacts of climate change.

Traditional means of financing post-disaster relief, recovery and reconstruction are proving to be inadequate, so governments are seeking innovative financing solutions that can provide funding in a timely manner while at the same time protecting nations' fiscal balance.

Tailor-made disaster financing strategies offer huge potential for South Asia as part of wider disaster risk management frameworks.

About the series
The ACT on knowledge series focuses on key emerging issues related to climate change and how they affect South Asia. Each leaflet synthesises existing knowledge on a topic and aims to stimulate discussion. Suggestions for further reading are provided at the end. Please see the full list of topics at **www.actiononclimate.today**

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ON KNOWLEDGE: 1

National disaster risk financing

Why South Asia needs disaster risk financing strategies

As a region, South Asia is highly exposed to disasters. In the period 2000–2015 in Afghanistan, Bangladesh, India, Nepal and Pakistan:

- Over 34,000 people have died as a result of drought, river floods and tropical cyclones
- In total, around 730 million people have been affected by one or more of these types of disaster
- The damages incurred have cost approximately US$62 billion.[1]

These figures do not include fatalities and damage caused by other types of disaster, such as the earthquakes that struck Nepal in April and May 2015.

Both the frequency and intensity of disasters in the region is increasing, due to population growth, urbanisation, development trends and the effects of climate change.

The region's governments tend to rely on financial strategies, such as budget reallocation, to pay for relief, recovery and reconstruction. However such strategies have significant limitations. **Proactive disaster risk financing strategies can enable governments to respond quickly and effectively while controlling the fiscal impact.** They are an integral part of disaster risk management, which also comprises other elements such as improved risk assessment and risk reduction.

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Post- and pre-disaster financing

Disaster financing instruments can be divided into two types, depending on whether they are put in place before or after a disaster.[2] Each type has advantages and disadvantages. The figure shows the main post- and pre-disaster mechanisms and how they can be sequenced to cover relief, recovery and reconstruction phases.

[1] Figures compiled from EM-DAT global database of natural and technological disasters.
[2] In economists' circles these two types are known as 'ex-post' and 'ex-ante' instruments.

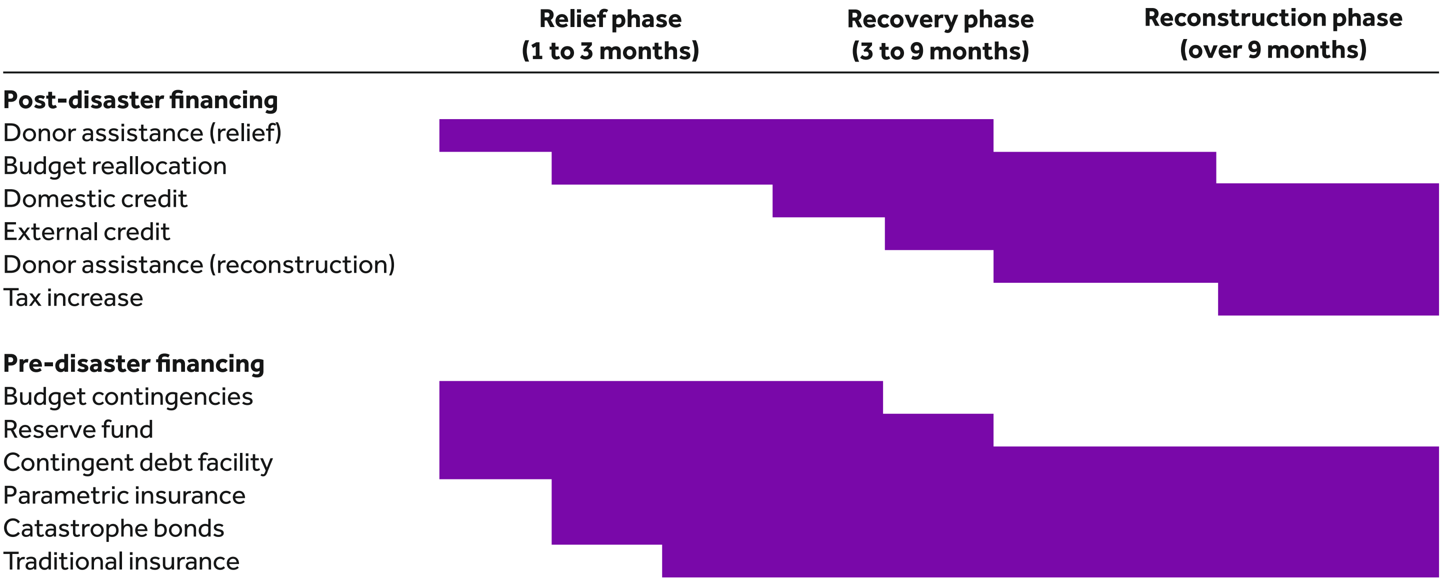

Figure 1: Sources of disaster financing

Source: Adapted from Ghesquiere and Mahul (2010)

Post-disaster financing instruments

Governments in South Asia and elsewhere have traditionally used post-disaster instruments, which do not require advance planning, to finance relief, recovery and reconstruction. Such instruments include: budget reallocations, domestic credit, external credit, tax increases and donor assistance. On the face of it, post-disaster finance instruments may seem less expensive than pre-disaster instruments, but they suffer from various problems, so they have hidden costs. For instance:

- Budget reallocations may deprive much-needed development programmes of their funding
- For economic and political reasons, governments in developing countries cannot accumulate enough budget reserves to respond quickly and adequately to major disasters
- Also, there are significant opportunity costs to holding large reserve funds in short-notice, low-interest accounts
- The administrative side of post-disaster instruments is often slow and complicated
- Emergency loans from external creditors may take a long time to negotiate
- The amount of contingent credit available after a disaster depends on national credit ratings, and may be too small to cover needs
- The scale of donor assistance after disasters can be unpredictable, because it is linked to factors such as the extent of media coverage in developed countries.

Pre-disaster financing instruments

By definition, pre-disaster risk financing mechanisms have to be designed in advance. They include calamity funds, budget contingencies, contingent debt facilities and risk transfer instruments. As their name suggests, risk transfer instruments (RTIs) pass risk to third parties. Insurance and reinsurance are traditional forms of RTI, while parametric insurance and catastrophe bonds are more innovative RTIs. Parametric insurance guarantees payouts to its customers, such as farmers, according to certain pre-defined triggers such as wind speed. Catastrophe bonds transfer the risk of a pre-defined disaster, such as a hurricane, to private investors. The Caribbean Catastrophe Risk Insurance Facility (CCRIF) provides an example of states working together to create an innovative and efficient regional disaster financing scheme with a risk pooling element (see box).

The Caribbean Catastrophe Risk Insurance Facility
The Caribbean Catastrophe Risk Insurance Facility (CCRIF) is a public–private partnership designed to limit the financial impact of hurricanes and earthquakes in 16 countries. It combines the benefits of a multi-country risk pool with parametric insurance.

The aim is to provide funds rapidly once the policy is triggered by a disaster. While CCRIF can finance the first loss of a disaster from its own reserves, it transfers excess risk to the international capital markets. CCRIF is designed to cope with a series of low probability major disasters, and has enabled the participating countries to attain a high level of resilience.[3]

In general, disaster risk financing is characterised by a trade-off between accessibility and cost (including opportunity cost). Funds from pre-disaster instruments can be disbursed quickly but they are usually expensive, so their accessibility comes at a price.

Analysing the disaster funding gap

Disasters in developing countries create funding gaps, as relief, recovery and reconstruction needs exceed resources, and legal and administrative bottlenecks delay disbursement. In order to avoid such problems, governments can analyse the likely funding needs that would arise after a disaster and compare them with the resources available. During this exercise, they should also consider the relative speeds with which different types of funding can be mobilised.

Assessing budget exposure and efficiency

The first step in analysing disaster funding needs is to look at fiscal data relating to previous disasters. Next, probabilistic risk modelling is used to predict future needs, and the likely gap between these needs and the available resources is estimated. **The funding gap analysis enables a tailor-made national financing strategy to be developed.**

Designing an optimal strategy

The optimal disaster financing strategy differs from country to country, depending on national exposure and resources. The basic principle of efficient disaster financing is that governments should use cheaper instruments, such as reserves, as far as possible. They should turn to more expensive instruments, such as contingent credit, only if the cheaper sources of financing cannot mobilise funds fast enough, or if they have they been consumed.

Disaster risk financing in South Asia

On the whole, governments in South Asia still rely on post-disaster financing instruments, although there is increasing interest in pre-disaster financing. While the region has seen several interesting initiatives, overall progress has been uneven.

Afghanistan

A National Emergency Fund has been established, financed by the central Government and international donors.

Bangladesh

A funding gap analysis was carried out for Bangladesh in 2014.[4] There has been an increase in funding to the Natural Disaster Risk Reduction Fund, a contingency budget line, and the Government has explored the feasibility of various risk financing and insurance instruments.

India

India has two major funding mechanisms for disaster relief and rehabilitation. The Calamity Relief Fund is managed by state governments, and states can turn to the National Calamity Contingency Fund if the intensity of disasters exceeds their own financial capacity. The National Agricultural Insurance Scheme protects farmers if their crops are damaged or destroyed by adverse weather events (see ACT on knowledge 4: Disaster microinsurance).

Nepal

Nepal relies on various types of financing, including: central and district-level Disaster Relief Funds, a Government Allocation Fund, and donor funding. The World Bank has funded a project to assess the feasibility of agricultural insurance in Nepal. A recent assessment highlighted the need to strengthen Nepal's financial, as well as technical, capacity to respond to disasters.[5]

Pakistan

The Government of Pakistan is investigating financial risk sharing options, and the World Bank has supported the development of recommendations for a comprehensive disaster financing strategy. A recent assessment of disaster risk in Pakistan highlighted the need for improved risk assessment practices, to support the establishment of a risk insurance fund for the most vulnerable communities.[6]

What can governments and the international community do?

South Asian governments need to decide on the level of fiscal resilience they want to achieve, before conducting funding gap analyses and designing comprehensive financing strategies.

[3] Ghesquiere and Mahul (2010).
[4] Ulubasuglo (2014).
[5] Ghimire (n.d.).
[6] Larsen et al. (2014).

KEY MESSAGES

- South Asia's disaster losses will increase in coming years, due to population growth, development trends and the impacts of climate change
- Developing comprehensive disaster risk financing strategies will strengthen governments' capacity to respond after disasters and at the same time provide fiscal protection
- There is a growing interest in customised strategies that suit countries' specific needs; analysing national disaster funding gaps is the first step towards designing a strategy
- A wide range of financing instruments is available, characterised by a trade-off between cost and accessibility
- Designing the optimal strategy means finding the right combination of cheaper instruments and more expensive instruments through which funds can be mobilised quickly
- Disaster risk financing strategies are one element of comprehensive disaster risk management frameworks.

How can the international community help?

Less than 5% of direct losses from disasters in low-income countries are insured, compared with over 40% in developed countries.[7] The growth of disaster insurance and reinsurance in South Asia is being held back by various market weaknesses. It makes sense for the donor community to facilitate their development by, for example:

- Helping to develop partnerships linking governments, donors and private markets
- Supporting the development of national or regional risk market infrastructure, for instance information collection and management systems
- Providing technical assistance to develop new instruments such as parametric insurance products
- Funding catastrophe risk insurance programmes, for instance by acting as guarantors of payouts.

[7] Cummins and Mahul (2009).

Sources and further reading

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