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**Research Report**

## Planning for Disasters and the Economics of Disaster Risk Financing and Insurance

FERDI Policy Brief, No. B123

**Provided in Cooperation with:**

Fondation pour les études et recherches sur le développement international (FERDI),  
Clermont-Ferrand

*Suggested Citation:* Clarke, Daniel J.; Dercon, Stefan (2015) : Planning for Disasters and the Economics of Disaster Risk Financing and Insurance, FERDI Policy Brief, No. B123, Fondation pour les études et recherches sur le développement international (FERDI), Clermont-Ferrand

This Version is available at:

<https://hdl.handle.net/10419/269725>

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# Planning for Disasters and the Economics of Disaster Risk Financing and Insurance

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## Introduction

In the aftermaths of disaster events, a systematic recovery and reconstruction phase is often hampered by strategic interactions between the national government, subnational government, donors, and affected people. As a result, recovery processes may be characterized by delays in response, underutilization of economies of scale, and reliance on costly financing instruments. These pre- and post-disaster inefficiencies can lead to a sluggish recovery process and increase both the economic and human cost of disasters. By developing solid plans for disasters, such inefficiencies can be avoided and a better humanitarian and disaster risk reduction system can be achieved. In particular, in order to better prepare for disaster events, governments should have (i) a coordinated plan for post-disaster action agreed in advance, (ii) clearly defined rules and triggers for disaster response, and (iii) risk financing to ensure that the plan can be implemented in the event of a disaster.

## ► Coordination and planning for outcomes

Disaster response plans often focus on the inputs available – such as people to be mobilized, goods to be deployed, and health services on stand-by – rather than on the outcomes envisaged. Moreover, often each institution has its own disaster plan on how to employ available resources. However, this approach may create inefficiencies, as it can lead to coordination issues and costly time delays. In the absence of a single, solid disaster response plan, responsibilities may be ill-defined, work steps may be either duplicated or omitted and the exploitation of economies of scale in logistics may be lost.

To avoid such inefficiencies, a good plan should be made before disasters strike. This should include a clear choice by all the relevant stakeholders stating who or what will be protected, against what, and who will pay for what. In making such decisions, typically trade-offs need to be made, particularly with respect to the question of how resources are to be used. However, while such trade-offs are by nature difficult, they are necessary and thus best made in advance of a disaster, as delays following a disaster may be costly.

A sound disaster response plan could start by giving a clear statement of how costs are divided between the national and sub-national government, what building standards should be observed in order to “build back better”, and that infrastructure should be registered to be eligible for protection. By forming such clear plans ahead of a disaster, governments can ensure a smoother, better coordinated and less onerous disaster response phase.

## ► Rules rule

Disaster response should be based on clear, objective rules and triggers, such that when a disaster strikes, well-defined processes are set off and implemented. For instance, this can

be achieved through the use of early warning and the determination of actions based on early warning data. Through the pursuit of this approach, disaster response would become a simple logistics implementation problem, dissociating disaster response from the display of political leadership.

Clear triggers for early action can help in streamlining disaster response. For instance, a clear trigger would be one that would specify the strength of a natural event or number of people infected with a particular disease such that response actions are set in motion. This process would be automatically prompted as soon as the trigger event occurs.

Of course, rules for early action are never perfect: Sometimes a rule will trigger action too early, and sometimes too late. However, response actions could be stopped through political decisions if actions were triggered erroneously. Moreover, evidence shows that acting early can help in reducing the cost of disasters. For instance, providing cash or food to households early in the face of an ensuing drought is more cost effective in reducing food insecurity than waiting until the drought is at its peak. Similarly, by agreeing in advance on a procedure to reconstruct damaged infrastructure – such as schools, hospitals and roads – following a disaster, costly time delays can be avoided.

## ► Credible rules and risk financing

Financing disasters ex ante can ensure that financial needs in the event of disasters are met, make disaster response plans credible and reduce uncertainty following disasters. In particular, a disaster risk insurance contract will detail what disaster events are insured and how large the payment in the event of the disaster would be. By insuring against disasters events, governments can cover immediate financial needs following a disaster in a cost-effective and timely manner.

Financial planning for disasters doesn't merely ensure that money is available following a disaster; it can also make a plan credible that ensures money is available quickly when—and only when—it is required. A credible and pre-agreed plan will commit different stakeholders to pay their shares and coordinate the amounts of funds that will be used. This, in turn, will ensure that financial needs are met, adequate resources are available, and coordination issues following disasters are reduced.

Finally, a disaster risk financing strategy can create certainty in the face of disasters. In particular, by insuring against disaster events, governments can be certain that immediate financial assistance will be available following a disaster, and will be aware of the extent of their coverage. In this way, governments can reduce their contingent liability in the event of disasters.

## ► Conclusion

Faced with potentially rising numbers of extreme events, disaster preparation is essential in order to offer better protection at the lowest possible cost. To facilitate this process, arrangements are necessary so that contingent liabilities—who covers what, whom, and how—are well defined and appropriately financed. By agreeing on cost-sharing rules and commitment incentives, governments can structure their financial needs and use resources efficiently. Disaster response plans can then be made credible through the use of disaster financing strategies, which will clearly detail the different sources of financing following a triggering event. Through the use of coordination, clear triggers and risk financing, disasters will become less sensational, but also less costly both in terms of human suffering and financially.



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n° ISSN : 2275-5055

