



## The Economics of Early Response and Resilience Series

### Key Messages

- **Early humanitarian response should become the dominant paradigm for responding to crises.** Early humanitarian response is far more cost effective than late humanitarian response, and a shift to early response does not incur any additional cost, and therefore benefit to cost ratios are infinite.
- **Economic concerns over false early response are unwarranted.** Country studies found that, for every early response to a correctly forecast crisis, early responses could be made 2-6 times to crises that do not materialise, before the cost of a single late response is met.
- **Investing in longer-term interventions that support resilience should be prioritized, alongside ongoing early response to humanitarian need.** While the cost of achieving resilience is uncertain, the analysis uses very conservative figures that demonstrate that investment in resilience will bring substantial returns in terms of need averted and broader developmental outcomes. Benefit to cost ratios varied between 2.3:1 and 13.2:1, depending on the country. Ongoing support for humanitarian crises should run alongside a greater focus on investment in resilience.

### Introduction

The impacts of natural disasters and complex emergencies have been increasing over recent decades, putting the humanitarian system under considerable pressure. The costs of humanitarian crises are also growing – not only do disasters and complex emergencies result in significant economic losses, but they also require mobilization of large amounts of humanitarian aid from the international community. According to a recent study on funding streams for emergency response, aid from governments reached US\$12.4 billion in 2010, the highest figure on record. And yet, despite a rhetoric that has called for reform for the past decade, only 4.2% of official humanitarian aid and 0.7% of non-humanitarian development assistance was invested in disaster risk reduction between 2006 and 2010.<sup>1</sup>

It is widely held that, broadly speaking, investment in early response and/or building the resilience of communities to cope with risk in disaster prone regions is more cost-effective than the ever-mounting humanitarian response. Yet little solid data exists to support this claim, and there is a clear need for a greater evidence base to support reform. As a result, the UK Government commissioned an independent study to contribute to filling these evidence gaps. The study was conducted in two phases: the first in Kenya and Ethiopia in 2012; and the second in Bangladesh, Mozambique, and Niger in 2013.

The study seeks to compare the cost of three scenarios:

- **Storyline A: Late response** results in humanitarian intervention.
- **Storyline B: Early response** is taken at the time of early warning of a crisis.
- **Storyline C:** Investment is made in **building the resilience of communities** to cope with drought on their own.

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<sup>1</sup> Kellet J. and H. Sweeney (2011). "Synthesis Report: Analysis of financing mechanisms and funding streams to enhance emergency preparedness." Development Initiatives, UK

The data was analysed from two perspectives:

- *Bottom-up Analysis:* The Household Economy Approach (HEA) was used to model the impacts of drought events on household economies.
- *Top-down Analysis:* Evidence on the costs of response at a national level were aggregated for the country as a whole.

### Summary of Findings

**Early response and resilience are far more cost effective than late humanitarian response.** The assumptions used in this analysis are conservative, and the findings nonetheless indicate that early response can decrease costs and losses substantially. **This is consistent across all five country studies, with early response saving billions of dollars over the 20 year period.** In Kenya, where comprehensive loss data was available, the model estimates that early response would save \$21b over 20 years, or an average of \$1bn per year. **Economic concerns over false early response are unwarranted.** Early response could be taken 2-6 times before the costs outweigh late response.

In Niger and Mozambique, the modeling was able to incorporate the cost and impact of specific initiatives in soil and water conservation as a resilience building measure, to model the change in food deficit in household economies. The impact was a reduction in costs of \$375m in Mozambique (for a modeled population of 2.6m) and \$844m in Niger (for a modeled population of 5.2m). In Ethiopia, where modeling also included loss data, commercial destocking could save \$1.6 billion for a modeled population of 2.8m. **The benefits of investing in resilience consistently outweigh the costs, yielding benefits ranging from \$2.3 to \$13.2 for every dollar invested.**

**Climate change strengthens the imperative for investment in resilience.** In Bangladesh, detailed analysis on the damages and losses associated with climate change, as well as the estimated adaptation costs, was available for both floods and cyclones. Over 20 years, the model suggests that, under climate change, early response could save between \$10.7 billion and \$13.5 billion, and resilience could save between \$15.6 billion and \$34.3 billion over a 20-year period.

### Recommendations

**Funding models must be changed to integrate relief and development in a coherent cycle.** The findings of this analysis fully support the HERR recommendation to change funding models by **increasing predictable multi-year funding** to help facilitate early response.

**In the short term, a more cost effective approach would be to prioritize early response measures.** Even if there is hesitation over whether a high magnitude event will occur, the cost difference is such that it is much more cost effective to invest in measures that promote early response. Further, many of these measures can also help to build resilience in the longer term.

**Spending on resilience needs to increase significantly, both in the short and the long term.** Current efforts to build resilience have remained largely at a pilot/demonstration level. Donors and governments need to shift far greater portions of funding into resilience, and in the short term this will also require continued funding to humanitarian aid as asset depletion is reversed.