

Work is underway on developing methods for identifying the impact of individual development projects on disaster risk. The Caribbean Disaster Mitigation Project, *Investing in Mitigation: Costs and Benefits*,<sup>46</sup> has identified three opportunities to incorporate disaster mitigation in infrastructure investment decision-making. The first is to integrate the assessment of disaster risk into existing environmental impact assessment procedures. The second is to fully integrate natural hazard risk into the economic and financial analysis of investment projects. The third is to promote hazard mitigation when the insurance industry is called upon to underwrite catastrophic protection for the investment project.<sup>47</sup>

It is unlikely that prospective risk management will completely eliminate all vulnerability, so compensatory risk management is set to play a long-term role in managing disaster risk. However, even here there are opportunities for planning to build resilience into vulnerable groups or investments.

## 1.8 Final Discussion

Achieving a more sustainable development, and one that moves towards the meeting of the MDGs, will not be possible while disaster risk management is left outside of development. The challenge for integration lies in devising the tools required for policy makers to transparently justify the closer operation of disaster and development policy.

Bringing disaster risk reduction and development concerns closer together requires three steps:

- The collection of basic data on disaster risk and the development of planning tools to track the changing relationship between development policy and disaster risk levels.
- The collation and dissemination of best practice in development planning and policy that reduce disaster risk.
- The galvanising of political will to reorient both the development and disaster management sectors.

The first two steps are perhaps the most challenging. Once the human welfare gains to be made from mainstreaming disaster risk reduction within development policy are carried out, and transparent inventories of best practice are made available, advocating for policy change becomes more achievable.

For this to be done, information gaps must be filled. As we have already emphasised, there is a dearth of basic data on disaster impacts and risks at all levels from the local to the global. Problems of mapping data are made more difficult by the dynamic nature of risk. Flux in global processes, tied in particular to economic globalisation and global climate change, and changing local conditions, including rapid urbanisation, the spread of HIV/AIDS or civil conflict, mean that disaster risk is not a static condition.

*In Reducing Disaster Risk: A Challenge for Development*, UNDP seeks to move this agenda forward by presenting a review of state-of-the-art information on the distribution of disaster risk at the international level and an account of key development pressures and best practice in disaster risk reduction tied to development policy.

1. ISDR 2002, *Living with Risk: A Global Review of Disaster Reduction Initiatives*; IFRC (annual) *World Disaster Reports*; Cannon, T., Twigg, J., Rowell J. 2003. *Social Vulnerability, Sustainable Livelihoods and Disasters*, DFID, London.
2. See annual editions of the International Federation of the Red Cross/Red Crescent *World Disasters Report* for a discussion of this trend. Original data sources from EM-DAT, University of Louvain, Belgium.
3. <http://www.eclac.cl/analisis/TIN53.htm#6>.
4. Benson 2002 expert contribution.
5. Source: Munich RE 2002. Topics: annual review, natural catastrophes 2002, Munich, p. 15.
6. UNDP/UNEP calculations for this Report.
7. The EM-DAT database is the only existing publicly accessible global database on disasters triggered by a natural hazard event. The strengths and weaknesses of using this database are discussed in the Technical Annex.
8. [www.un.org/millenniumgoals](http://www.un.org/millenniumgoals)
9. United Nations. 2000. *United Nations Millennium Declaration*, General Assembly Resolution A/RES/55/2, 18 September 2000, p. 6.
10. <http://www.undp.org/mdg/countryreports.html>
11. Sen, Amartya. 2000. *Development as Freedom*, New York, Random House.
12. Implementation of the United Nations Millennium Declaration: Report of the Secretary-General, United Nations General Assembly, 2 September 2003. *UNDP Human Development Report 2003*. <http://www.actionaid.org/ourpriorities/downloads/halfwaythere.pdf>
13. Here we can mention the High Indebted Countries Initiative (HIPC) promoted by the World Bank and the International Monetary Fund, and the New Partnerships for Africa's Development (NEPAD) in Africa and the integrated United Nations Development Assistance Frameworks (UNDAF) among others.
14. See the World Bank series of publications entitled *Voices of the Poor* and the *World Development Report*, 2000, p. 19.

15. Two other periods of recent history during which sea changes in thinking about disasters took place can be identified. First, a series of disasters from 1968-1973, including the Sahel famine, Biafra and Bangladesh independence wars and associated famines, 1970 Bangladesh cyclone and the 1972 Peruvian earthquake. These events first pointed out how little coordination there was among humanitarian agencies. Secondly, the wake-up call that rich countries received between Hurricane Andrew, Miami, 1992, through the floods that hit the Midwest of the United States, 1993, to earthquakes at Northridge, CA., United States, 1994. and Kobe, Japan, 1995.
16. *Living with Risk: A Global Review of Disaster Reduction Initiatives* is a major output of ISDR Secretariat published in 2003. The document represents a global review of and resource on disaster reduction initiatives. Disaster risk reduction is seen in the broader context of sustainable development. The escalation of severe disasters is seen to be imposing an increasing threat to both sustainable development and poverty reduction initiatives. It is argued that the post-disaster reconstruction period provides the most opportune time to introduce disaster reduction into sustainable development planning. Therefore, political commitment and social acceptance of the value of risk reduction are necessary for forward-looking developers who want to increase the sustainability of communities.
17. *World Disasters Report 2001: Focus on Recovery* examines how governments and aid agencies are working to promote recovery from mega-disasters within a sustainable development paradigm. *World Disasters Report 2002: Focus on Reducing Risk* argues that risk reduction is an essential condition for sustainable development. It examines disaster preparedness and mitigation initiatives from disaster-prone countries across the globe. Included are chapters featuring the challenges and opportunities facing risk reduction and disaster preparedness, with success stories from Mozambique and Latin America, and details of mitigating effects of global warming in Pacific island states, among many other examples of good practice. See <http://www.ifrc.org/publicat/wdr/>
18. <http://www.ifrc.org/publicat/wdr/>
19. See references in the bibliography from institutions in Latin America and the Caribbean, Asia and Africa.
20. <http://hdr.undp.org/hd/default.cfm>
21. <http://hdr.undp.org/aboutus/default.cfm>
22. The economic component is the core competency of other international agencies such as the World Bank. While integration of human and economic development perspectives is necessary and at the policy level ongoing, for clarity, *Reducing Disaster Risk: A Challenge for Development* concentrates more on human development.
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