

Executive summary

The Case for Business to Undertake Disaster Risk Reduction Activities



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1. Natural disasters are a major obstacle to socioeconomic development

Economic losses from natural disasters are unacceptably high and continue to increase. According to Munich Re, there were record losses of around USD 210 billion in 2005, with insurance claims of USD 94 billion. This burden is even more dramatic for developing countries: while insurance has covered more than 50% of losses in USA and 30% in Europe, it has covered only 5% of the losses in Asia.

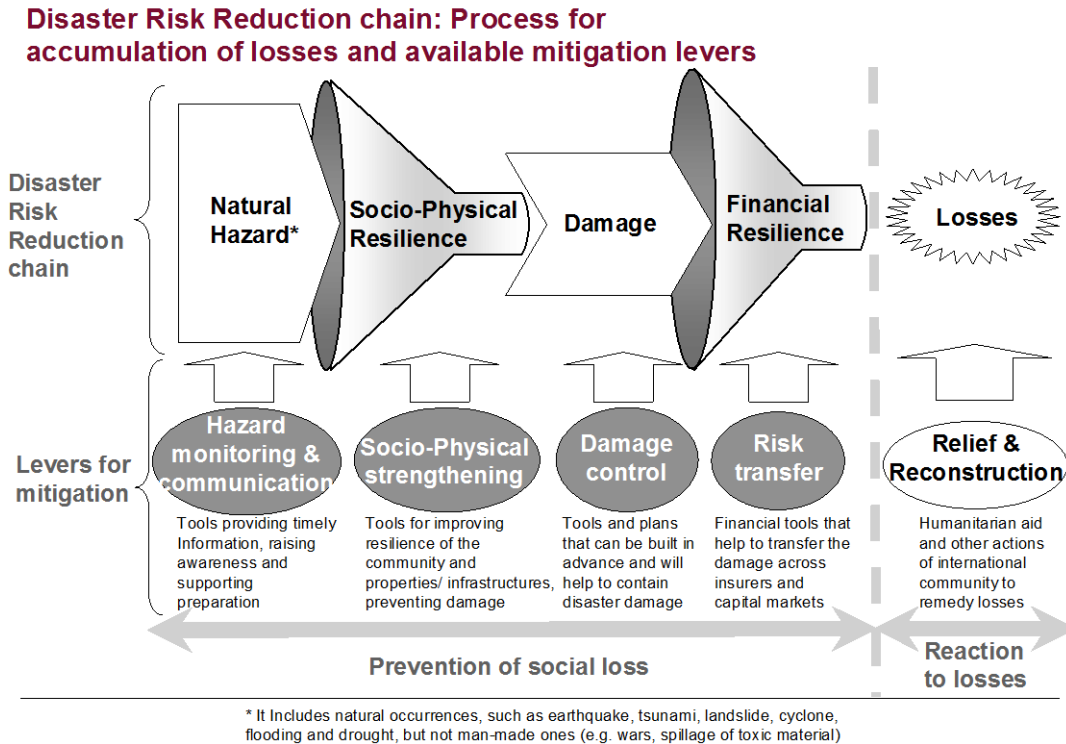
Prevention is considered much more efficient than relief and reconstruction. Around 90% of disaster-related expenditure is still directed to relief and reconstruction, after the consolidation of the losses. Informal estimates indicate that for each USD invested in resilience and prevention, around USD 4 are saved in response. In order to stimulate resilience, 168 governments have adopted the Hyogo Framework for Action in the UN World Conference on Disaster Reduction in January 2005.

Despite the potentially large untapped resources of the private sector, there are no systematic strategies for its engagement yet. The international debate on Disaster Risk Reduction (DRR) has evolved and has yielded several initiatives, including the UN sponsored International Strategy for Disaster Reduction (UNISDR) with its Global Platform for Disaster Risk Reduction and, more recently, the World Bank's Global Facility for Disaster Reduction and Recovery. However, most of the debate and discussion has been oriented towards public institutions and international organizations. While Public-Private Partnerships are one of the most important components of the Hyogo Framework for Action, not much has been done to engage the private sector.

Recognizing the nature of the challenge, the World Economic Forum, with the support of the UN International Strategy Disaster Reduction (UNISDR), the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR), has launched a 2-phase initiative for building strategies for engaging the private sector as an integral element of risk reduction and sustainable agenda in natural disaster hotspot countries.

2. Initial efforts focused on identifying tools available for each industry

The efforts of Phase 1 were initially focused on analyzing the four levers for risk mitigation, identifying the main drivers for intervention and potential tools for private sector action. The picture below synthesizes the Disaster Risk Reduction chain of events, and the potential levers available for intervention and mitigation of the losses.

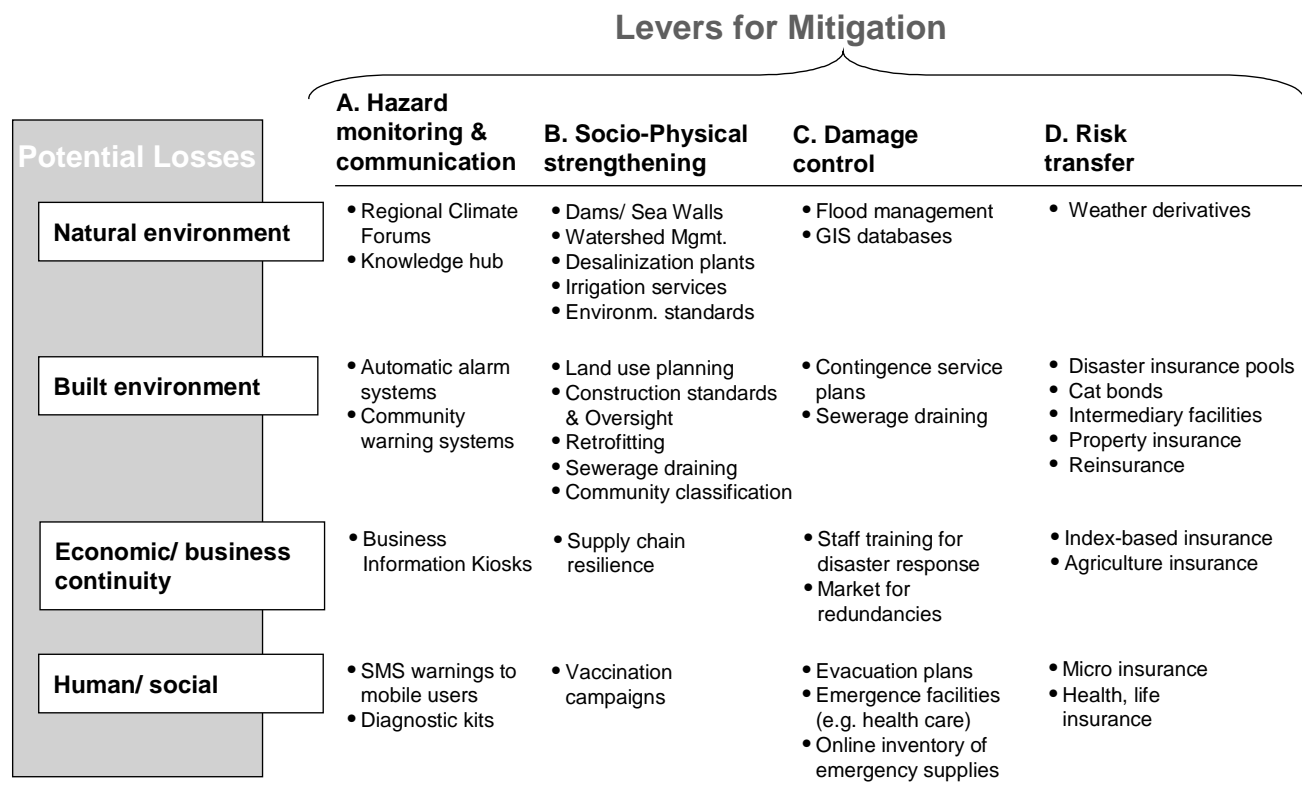


The drivers identified for each lever are:

- **Hazard monitoring & communication:** Predicting/ forecasting disasters, identifying disasters and consolidating/ diffusing information.
- **Socio-physical strengthening:** Avoiding risky surroundings, strengthening surroundings, strengthening structures and fixing fragilities.
- **Damage control:** Planning response, reaction systems, accelerating relief and backup systems.
- **Risk transfer:** Increasing market penetration, pooling risks and transferring risk.

We identified several tools for each lever. For instance, the driver risk transfer has four tools: reinsurance, catastrophe bonds, index-based insurance and weather derivatives. These tools were then organized around the category of losses that they potentially mitigate: natural or built environment, economic/ business continuity or human/ social losses. This process led to the first generic Mitigation Map, which is synthesized in the chart below:

Preliminary Mitigation Map: potential tools for private sector engagement



We then developed potential rationales for private sector involvement for each of these tools. The rationales were organized around the economic interests of each industry and will be the basis for the construction of detailed business cases in Phase 2. The rationales for each tool were then segregated per industry and Mitigation Maps were developed for each industry. The eight industries considered were: Financial Services, Engineering & Construction, Utilities & Transport, ICT & Telecom, Extractive & Agriculture, Manufacturing, Pharma & Health Care and Tourism.

The last stage of Phase 1 involved consolidating the accumulated knowledge per industry with analyses of the strengths, weaknesses, opportunities and threats to its contributions to Disaster Risk Reduction activities.

3. Key findings of Phase 1

3.1. Governments, multilaterals and NGOs are important for enabling stronger private sector engagement

Governments, multilaterals and NGOs play a very important role in developing business cases and prioritizing efforts for effective engagement of the private sector. Despite its growing relevance, corporate social responsibility still has low calling power and a clear business case on Disaster Risk Reduction activities is essential for sustained motivation. Additionally, while there are thousands of engagement opportunities around the globe corporations have limited budgets for initiatives with unclear economic returns. It is, therefore, essential that governments, multilaterals and NGOs engage in the design of precise risk maps, assessment of the risks, prioritization of efforts, clarification of the economic benefits and specification of required inputs for effective strategies.

One of the key obstacles to private sector involvement is the availability of information. Solid, updated information bases, such as weather stations for water related disasters, are usually public goods since they are often too expensive to be funded by any individual or company. Therefore, the efforts to increase the available pool of information related to disaster risk should be led by governments and international organizations, in collaboration with the private sector.

Opportunities should be seen as building blocks of an integral strategy. Despite the existence of some good, isolated ideas, most solid opportunities appear when studying the Disaster Risk Reduction chain systematically. Therefore, in order to identify the most effective role of each entity, including private sector organizations, it is necessary to analyze in detail the specific losses, available mitigation tools, commercial interest of specific industries and strengths and weaknesses of each involved organization. For these analyses, governments, multilaterals and NGOs are fundamental participants.

3.2. Local engagement is a key for effective Disaster Risk Reduction strategies.

Potentially affected businesses and inhabitants are the cornerstone of effective Disaster Risk Reduction strategies. Potentially affected businesses and inhabitants are the primary beneficiary of risk transfer tools and they decide whether to substantially increase the efficiency of hazard monitoring and damage control, and whether to adopt strengthening measures or not. Action plans always need active bottom-up participation in order to be effectively implemented.

To ensure adequate engagement and commitment, strong perception of risks by stakeholders is essential. Effective DRR actions require high levels of commitment, investment and alignment, factors that are usually not present unless there is strong risk perception. However, in the immediate aftermath of disasters there is a higher willingness for action. Taking advantage of these windows of public interest increases the probability of success.

3.3. Industry know-how and the global value chains should be better leveraged

There are significant opportunities for leveraging sectoral know-how for Disaster Risk Reduction activities. The potential diversity and extent of private sector involvement in Disaster Risk Reduction is still not properly leveraged. Current contributions are usually focused on cash and do not take advantage of the unique accumulated know-how in the private sector. Each industry has clear strengths and expertise that can be leveraged for Disaster Risk Reduction activities, for instance, Engineering & Construction may be the driver for safer land use planning and construction standards and ICT & Telecom may play an essential role in hazard monitoring and communications.

As developing regions establish their presence in global value chains, the business case for Disaster Risk Reduction activities is strengthened. There has been a substantial increase in investment and economic activity in developing countries in recent years. As some developing regions establish their presence in global value chains, corporations become more vulnerable to eventual disaster losses there and the business case for Disaster Risk Reduction activities is strengthened. Regions with a high concentration of manufacturing, such as the Chinese Coastal Zone, or of service firms, such as the Caribbean, present favorable conditions to host the initial pilots, with intensive participation of locally established international firms.

3.4. While the financial services industry has the clearest business cases, there are a broad range of opportunities for private sector involvement

Insurance companies are natural leaders of Disaster Risk Reduction strategies. The insurance industry is best positioned to assess and evaluate risks and the most direct beneficiary of any reduction in losses and widespread usage of risk transfer tools. Many tools with solid business rationale are available, including micro insurance/insurance pools that can help to increase penetration, partnerships for information bases e.g., weather stations and knowledge hubs, and initiatives that can reduce reimbursements e.g., retrofitting, building codes, and emergency training.

In addition to the financial services sector, we have identified opportunities with a clear business case in seven other sectors:

- **Engineering & Construction:** May play a central role in establishing rules for land use planning and construction standards and building oversight structures. Industry may also benefit from other services, such as irrigation and the construction of emergency facilities and dams/ sea walls;
- **Utilities & Transport:** Large potential role in water management (dams/ sea walls, irrigation, desalination, flood management, sewerage draining) and business continuity activities, e.g., contingency service plans, supply chain resilience and redundancies;
- **ICT & Telecom:** Information technology plays a disproportionately important role in hazard monitoring & communications e.g. knowledge hubs, business kiosks and SMS warnings, as well as on the 'soft side' of damage control, organizing and accelerating response;
- **Extractive/ agriculture:** High potential for collaboration on weather-related tools e.g., regional forums, watershed management, irrigation, flood management and in activities that help business continuity e.g., supply chain resilience, business kiosks, index-based insurance;
- **Manufacturing:** Potential collaboration on solutions to increase physical strengthening e.g., retrofitting, land use planning, and on business continuity tools e.g., supply chain resilience, contingency plans, emergency training, since it affects the global value chain of manufacturing companies;
- **Health care & Pharmaceuticals:** High potential for opportunities related to human/social losses e.g., diagnostics, vaccination, online inventory, micro insurance, and in building knowledge hubs related to specific diseases;
- **Tourism:** Interest in business continuity and preservation of safety image generates opportunities in retrofitting, supply chain resilience and emergency training. Ecotourism segments may also generate opportunities in environmental standards.

4. Phase 2 will focus on the development of concrete business cases for the most promising opportunities

While the first phase of the study was focused on achieving a holistic view of the tools and opportunities available, the second phase will focus on fleshing out the identified opportunities and will include a deep dive on the financial services industry.

The validation of the opportunities identified will be done through interviews and in meetings with representatives from each sector where business cases will be tested, the tools refined and the potential interest from the private sector measured. The regional World Economic Forum dialogues can complement this effort. Such meetings would improve understanding of the working dynamics of each tool and clarify the business cases for the private sector.

It is important to notice that the level of relevance of each tool is likely to vary significantly. A process of prioritization, according to the strength of the business case and potential impact on Disaster Risk Reduction, will be important for assuring effective action. A proper implementation of the priority tools and opportunities will depend on the design of effective strategies. In order to accumulate know-how and create success stories and early wins, the strategy is likely to leverage carefully chosen pilots.

Background: Institutional Context

Recognizing the challenge of private sector involvement on DRR activities, UNISDR, the World Economic Forum, and the World Bank, with funding support from GFDRR, have launched an effort to document working models and build strategies for promoting the private sector as an integral element of risk reduction and sustainable agenda in natural disaster hotspot countries. This effort, carried out through facilitated private and public sector expert sessions, desk research, company interviews, and peer reviews, takes into account corporate practices as well as the practical experiences of governmental authorities and community-based organizations.

This effort started with a one-day dialogue (Dialogue on Private-Public Partnerships for Disaster Risk Reduction) held at the World Bank Group headquarters on 22 February 2007. Bringing together officials from governments (e.g. US, Japan, UK, India) and international organizations (e.g. United Nations, World Bank Group, World Economic Forum) with their private sector counterparts – from organizations such as IBM, Swiss Re and Munich Re – this event was a practical first step to foster closer collaboration. The debate has progressed with an event in Geneva on June 4th (Disaster Risk Reduction and Private Sector Leadership), co-sponsored by UNISDR and the World Economic Forum. These events are being complemented by a series of regional dialogue sessions, one of which has already been held in South Africa in July.

In order to support these discussions with research and fact-based analysis, the World Economic Forum has simultaneously launched the study “The Case for Business to Undertake Disaster Risk Reduction Activities”. Working in close contact with the Global Facility for Disaster Reduction and Recovery of the World Bank and the United Nations’ ISDR secretariat, the Study aims to review successful cases and build strategies for involving the private sector in effective and sustainable solutions to DRR.

The Program is divided in two phases, from which the first has focused in understanding the process through which losses are accumulated in disasters, the levers for intervention with their potential tools and rationales for private sector involvement in each tool.