To reduce disaster risk, it is important to reduce the level of vulnerability and to keep exposure as far away from hazards as possible by relocating populations and property. Figure 1.4 shows how disaster risk can be reduced and indicates the area of disaster risk. The disaster risk shown here is smaller than that shown in Figure 1.3. The reduction of vulnerability can be achieved through such measures as mitigation and preparedness.

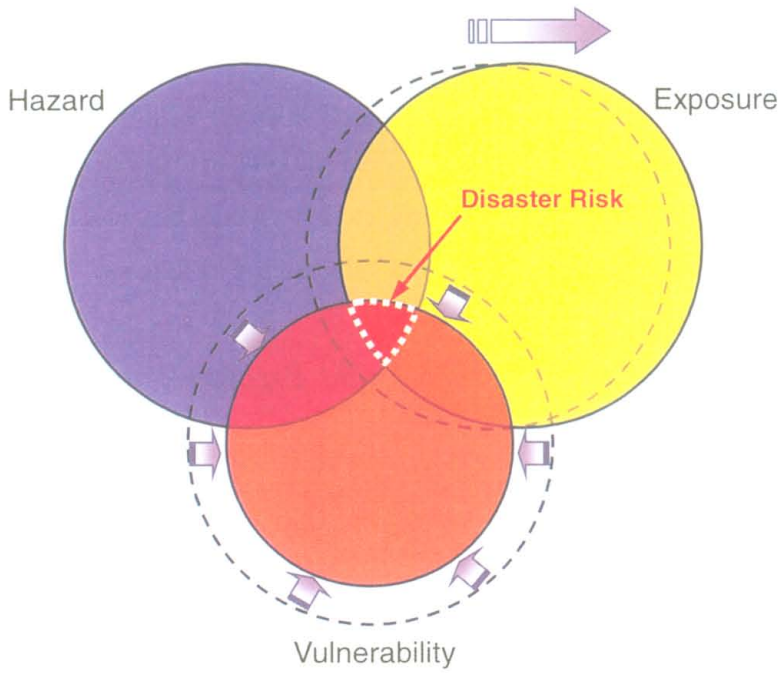


Figure 1.4 Mechanism of Natural Disaster Reduction

1.3 Disaster Risk Management for Sustainable Development

Under the circumstances we now face, achieving sustainable development is of vital importance to every country. Figure 1.5 shows that various impediments such as political or social conflicts, financial crises, diseases (*e.g.*, HIV/AIDS), environmental degradation and natural disasters hinder efforts to create a sustainable world. Natural disasters trigger especially devastating consequences, and are compounded by other factors. Disaster risk management is therefore essential for the realization of sustainable development.

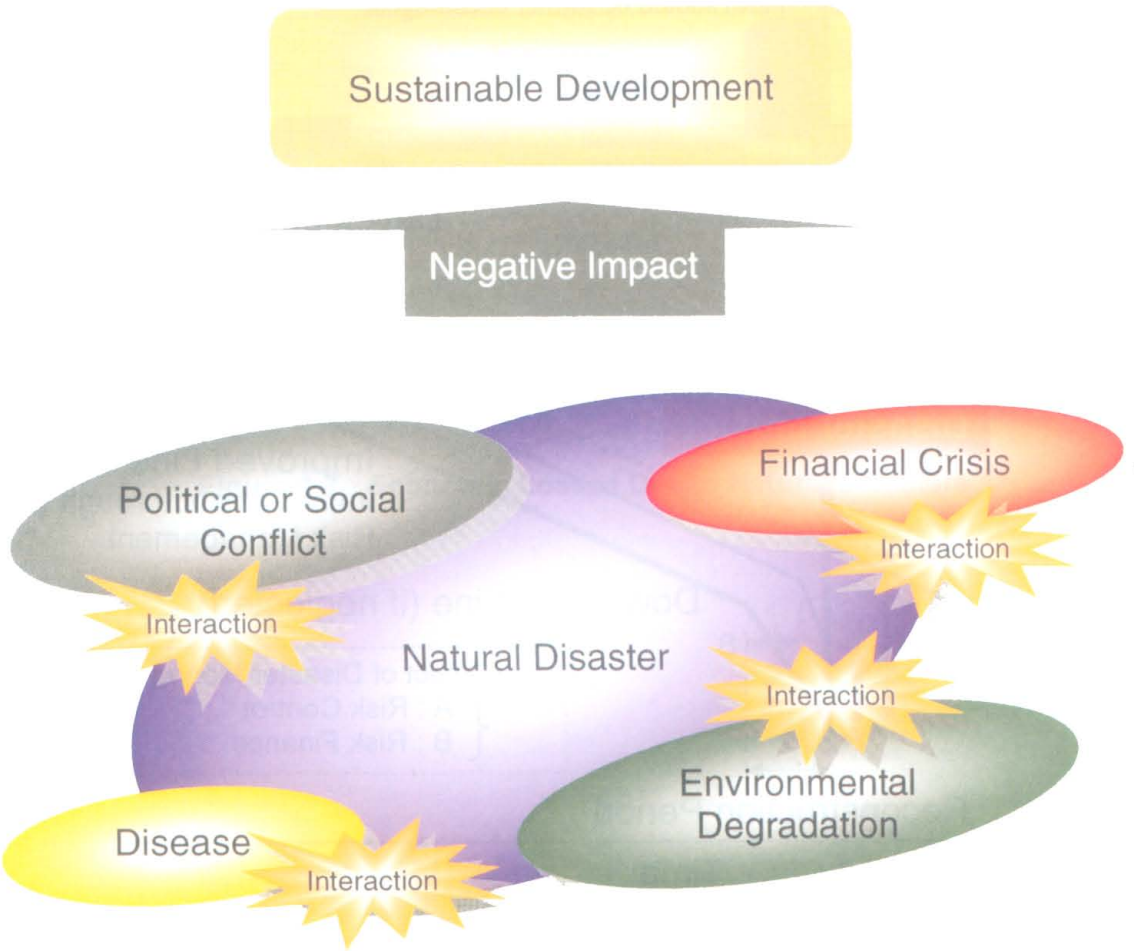


Figure 1.5 Impediments to Sustainable Development

Figure 1.6 illustrates the relationship between the development of a country and natural disasters. In this figure, the break line (Trend Line) indicates the original national development target. The thick solid line (Downtrend Line) shows how development is hampered by natural disasters. Accordingly, the disaster impact can be reduced by disaster risk management efforts. The improvement achieved through disaster risk management is shown by the thin line (Improved Line), indicating reductions in the levels of loss and the length of the reconstruction period through risk control (*e.g.* mitigation) and risk finance (*e.g.* insurance, disaster funds), respectively.

Figure 1.7 shows the economic losses sustained by the world due to natural disasters, and indicates an increase in economic losses over time. In addition, ratios of insured losses are not large enough to cover all of the economic losses. Thus, risk control should be further encouraged.

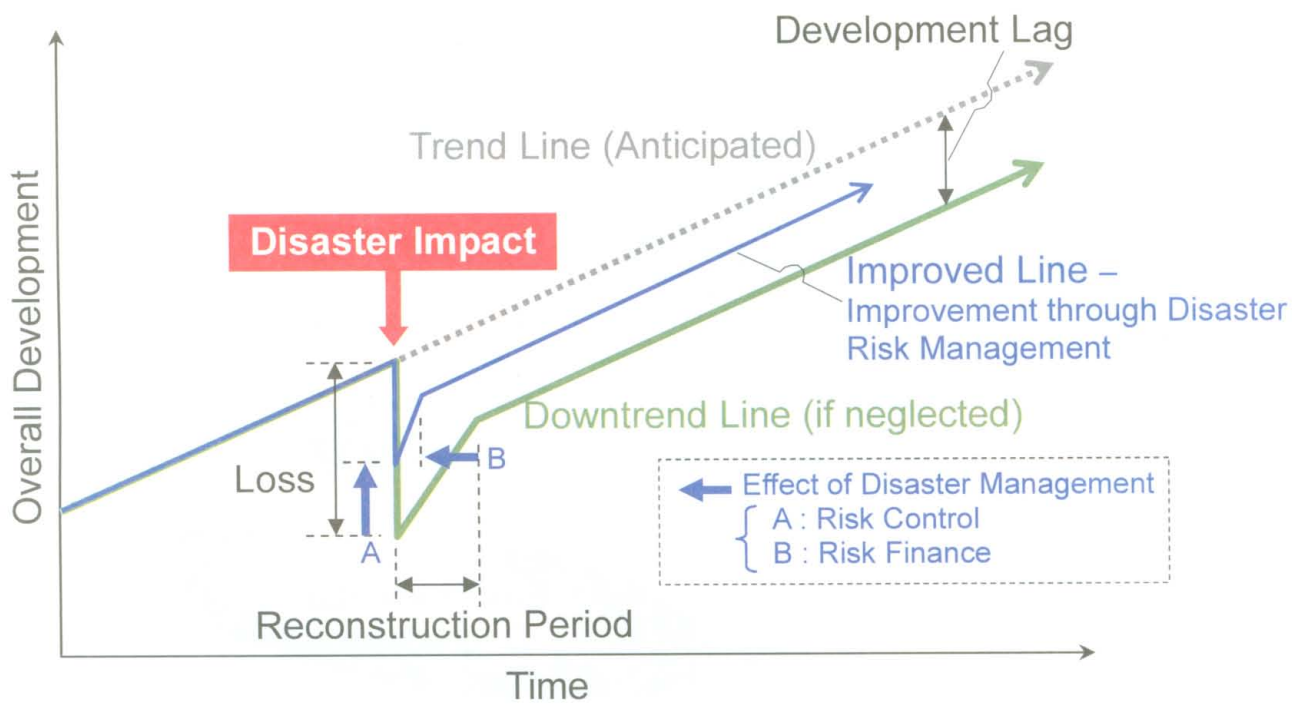
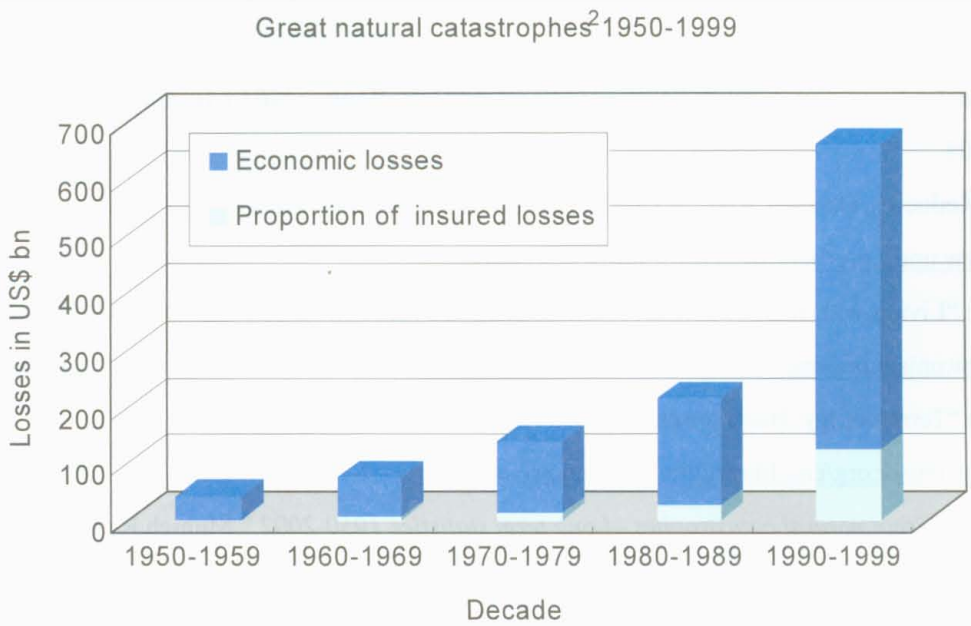


Figure 1.6 Correlation in Disaster Risk Management



Source: Munich Re 2002, Losses: 2002 values.

Figure 1.7 Economic Losses Due to Natural Disasters

[2] "Natural catastrophes are classed as great if the ability of the region to help itself is distinctly overtaxed, making interregional or international assistance necessary. This is usually the case when thousands of people are killed, hundreds of thousands are made homeless, or when a country suffers substantial economic losses, depending on the economic circumstances generally prevailing in that country."

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