

BLOCK 1
THE RELATIONSHIP BETWEEN DISASTERS AND DEVELOPMENT

HANDOUT 1

THE DISASTER, DEVELOPMENT NEXUS

The following is supporting material to elaborate on and expand the content of Presentation 1

- **Is the number and frequency of disasters growing?**

Yes, the number and frequency of disasters is growing. According to Munich Re (one of the world's largest re-insurers), economic losses from disasters in the 1990s totalled over US\$608 billion, greater than losses over the four previous decades combined. This is supported by recent research by the Centre for Research on the Epidemiology of Disasters (CRED) based in Belgium, which found that there were 360 natural disasters in 2005 compared with 305 in 2004. Most agree that the number of disasters will increase as climate change and global warming generate more severe weather-related events. These events will affect economic development and slow down progress towards the Millennium Development Goals.

- **What are the links between disasters and poverty?**

The links between disasters and poverty are clear. The poorest are worst affected and suffer the most. Disasters damage infrastructure and affect productivity and growth. The capacity to cope and to reduce risk is much more limited in poor countries so people are more vulnerable. Impacts on communities can be severe: disasters increase poverty and malnutrition and reduce disease resistance. Families made poor, hungry or ill often have to send their children out to work rather than to school, and women and girls are often left with poorer health and an increased workload.

- **What are the economic benefits of disaster risk reduction?**

There is growing evidence of the economic benefits of disaster risk reduction. The IMF estimates that the average economic cost for each individual large-scale natural disaster event was over 5% of Gross Domestic Product (GDP) in low-income countries between 1997 and 2001. Recent World Bank estimates have placed this figure in the range of 2 - 15% of GDP for low-income countries. Moreover, the impact and incidence of disasters is rising, with Munich Re reporting that economic losses in the 1990s exceeded those of the previous four decades combined. However, where major disaster risk reduction efforts have been made, for example in many small island states, average annual damage relative to GDP has declined sharply. Studies assessing the relative costs and benefits of individual disaster risk reducing initiatives have also indicated high potential returns for disaster risk reduction, and it is estimated that for every dollar invested in disaster risk reduction, between 2 and 4 dollars are returned in terms of avoided or reduced disaster impacts.

- **Why have development organisations under-invested in disaster risk reduction?**

One factor is that perverse incentives work against disaster risk reduction. Governments may know that they can rely on the international community to respond generously when a disaster hits, which could be a disincentive for investing in prevention. Disaster risk reduction is long-term and low profile. Disaster

response on the other hand is highly visible and therefore has received greater political attention than disaster risk reduction. Whilst continuing to respond generously to disasters, we must alter the balance and invest more in prevention.

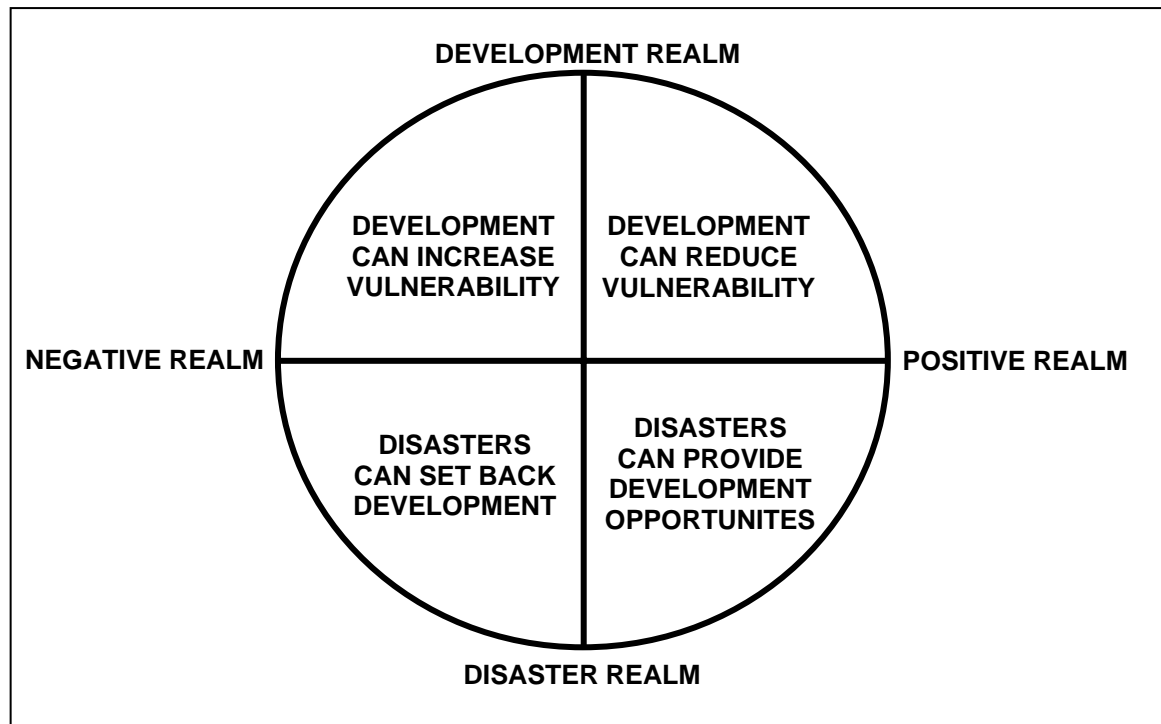
- **How can we encourage developing countries to invest more in disaster risk reduction?**

We need to help governments make the choices of where to invest. At the moment we lack information on the costs and benefits of reducing the impact of disasters. The long-term impact of disasters needs more research. We need a better evidence base for helping to decide which disaster risk reduction interventions to invest in. These choices are pretty tough for cash strapped governments. Do you invest in health or education that will bring a rapid benefit or disaster risk reduction when a disaster may not strike for 50 years?

- **Why do we need to better integrate disaster risk reduction into development?**

Disasters do not just happen - they result from failures of development, which increase vulnerability to hazards. Political systems recognise the need for strong intervention following a disaster. The challenge is to increase the focus on disaster risk reduction.

WHY SHOULD DISASTERS BE A DEVELOPMENT CONCERN?



Development Can Increase Vulnerability

- Urban development and population influx lead to crowded housing on unsafe sites.
- Coastal zone development increases vulnerability to tsunamis / tropical storms / flooding.
- Transport construction leads to deforestation and landslides.
- Dams and irrigation schemes increase flooding risk and possible dam failure.
- Poorly controlled industrial development lead to air / water / smoke pollution / exposure to toxic materials.
- Livestock development leads to desertification from overgrazing.

Development Can Reduce Vulnerability

- Strengthening urban utility systems and industrial support increase response capacity.
- Incorporating hazard-resistant building techniques to withstand disaster shock.
- Building codes and zoning regulations reduce overcrowding.
- Improved administration and training programmes improve preparedness planning.
- Reforestation and soil conservation programmes reduce flood risk from Erosion.

Disasters Can Set Back Development

- Loss of resources.
- Interruption of programmes.
- Negative impact on investment climate.
- Political destabilisation.

Disasters Can Provide Development Opportunities

- Highlights areas of vulnerability.
- Creates a favourable political climate for social and economic change.
- Results in capital injections from donors
- Allows destroyed problem areas to be rebuilt more safely

Disasters Hold Back Development¹

Disasters Undermine Efforts to Achieve Millennium Development Goals

MDG	Direct Impact	Indirect Impact
1. Eradicate extreme poverty and hunger	Damage to housing, service infrastructure, savings, productive assets and human losses reduce livelihood sustainability.	Negative macroeconomic impacts including severe short-term fiscal impacts and wider, longer-term impacts on growth, development and poverty reduction. Forced sale of productive assets by vulnerable households pushes many into long-term poverty and increases inequality.
2. Achieve universal primary education	Damage to education infrastructure. Population displacement interrupts schooling.	Increased need for child labour for household work, especially for girls. Reduced household assets make schooling less affordable, girls probably affected most.
3. Promote gender equality and empower women	As men migrate to seek alternative work, women/girls bear an increased burden of care. Women often bear the brunt of distress 'coping' strategies, e.g. by reducing food intake.	Emergency programmes may reinforce power structures, which marginalise women. Domestic and sexual violence may rise in the wake of a disaster.
4. Reduce child mortality	Children are often most at risk, e.g. of drowning in floods. Damage to health and water & sanitation infrastructure. Injury and illness from disaster weakens children's immune systems.	Increased numbers of orphaned, abandoned and homeless children. Household asset depletion makes clean water, food and medicine less affordable.
5. Improve maternal health	Pregnant women are often at high risk from death/injury in disasters Damage to health infrastructure. Injury and illness from disaster can weaken women's health.	Increased responsibilities and workloads create stress for surviving mothers. Household asset depletion makes clean water, food and medicine less affordable.
6. Combat HIV/AIDS, malaria and other diseases	Poor health & nutrition following disasters weakens immunity. Damage to health infrastructure. Increased respiratory diseases associated with damp, dust and air pollution linked to disaster.	Increased risk from communicative and vector borne diseases, e.g. malaria and diarrhoea diseases following floods. Impoverishment and displacement following disaster can increase exposure to disease, including HIV/AIDS, and disrupt health care.
7. Ensure environmental sustainability	Damage to key environmental resources and exacerbation of soil erosion or deforestation. Damage to water management and other urban infrastructure. Slum dwellers/people in temporary settlements often heavily affected.	Disaster-induced migration to urban areas and damage to urban infrastructure increase the number of slum dwellers without access to basic services and exacerbate poverty.
8. Develop a global partnership for development	Impacts on programmes for small island developing states from tropical storms, tsunamis etc.	Impacts on commitment to good governance, development and poverty reduction—nationally and internationally.
ALL MDGs		Reallocation of resources from development to relief and recovery.

¹ DFID, Disaster Risk Reduction: A Development Concern. A scoping study on links between disaster risk reduction, poverty and development.

Macroeconomic Impacts of Disasters

Assessing macro-economic impacts of disaster

In addition to **direct impacts** (physical damage to infrastructure, productive capital and stocks), disasters cause **indirect costs** and **secondary effects**. Indirect costs accrue when productive output is reduced because of damaged assets and infrastructure or a workforce weakened by disaster losses. Secondary effects include longer-term consequences for the economy, for example levels of household and national indebtedness, fiscal and monetary performance or the effects of relocating or restructuring elements of the economy or workforce or resettling populations.

Indirect and secondary losses can be seen in the 1991-92 drought in Zimbabwe where the manufacturing sector was hit by reduced hydroelectric output. Combined manufacturing and agricultural losses reduced 1992/93 GDP by 8 percent. Similarly, flooding in South Africa in 1999/2000 depressed agricultural productivity by 18 percent for the first quarter of 2000³³. Evidence from the Philippines demonstrates the interconnectedness of natural disaster shocks with other development pressures. Here 1990s annual GNP growth peaked at 7.2 percent in 1996, but in the following year the Asian financial crisis brought a reduced growth rate of 5.3 percent, and in 1998 the combination of the after-effects of this crisis and an El Niño event led to a dramatic decline in GDP growth to just 0.4 percent - the lowest for the decade. Citing evidence from 16 Latin American and Caribbean countries, the IMF estimates that one percentage point of GDP in direct damage from 'natural' disasters can reduce GDP growth by half a percentage point in the same year.

Ongoing research supported by the World Bank, ProVention Consortium and the UN Economic Commission for Latin America and the Caribbean (ECLAC) has begun to unpack some of the complex relationships between natural disaster shocks and macro-economic status. ECLAC has played a lead role in developing and applying assessment tools for these three categories of macro-economic impact. 34 Applying this framework ECLAC finds that Latin America and the Caribbean have accumulated over US\$ 65 billion in damages from disasters, with smaller, less developed countries in the Caribbean, Central America and Andes disproportionately affected.

Macroeconomic impacts of the August 1999 Turkish earthquake

The earthquake, which struck Turkey on 17 August 1999, was centred in the country's most industrialised and economically dynamic area. The four districts most severely affected (Kocaeli, Sakarya, Bolu and Yalova) contribute over seven percent of the country's GDP and 14 percent of industrial value added. Per capita income is almost double the national average. Though containing only four percent of the nation's population, the region contributes over 16 percent of budget revenues. With the impacts of the earthquake compounding the effects of the global financial crisis, Turkey suffered a severe recession that year with a real GDP decline of 6.1 percent. The OECD put the direct output loss from the earthquakes at half to one percent of GDP. The aggregate economic loss has been put at US\$ 16 billion (about seven percent of GDP), much of this attributable to a decline in economic activity both in the earthquake zone and in the immediately surrounding districts (Bursa, Eskisehir, and Istanbul) economically linked to it. Impact on the public finances was significant, with direct fiscal costs totalling one percent of GNP

in 1999 and two percent in 2000, and a decline in 1999-2000 revenue of around half a percent of GNP. These estimates suggest that the macroeconomic impact of the earthquake was substantial, and the destruction of both physical and human capital may have had a long-term negative effect on the country's economic growth prospects.

Disaster Impact on Communities and Livelihoods

Child mortality in floods in Vietnam

In recent years, annual flooding in the Mekong Delta of Vietnam has claimed hundreds of lives, the vast majority of which have been young children. The worst year was 2000, when 400 children died, closely followed by over 300 child deaths in 2001. In 2002, 99 children died - out of a total death toll in the Delta of 106. A study coordinated by Save the Children reported that most deaths were among children aged under-six from poor families. Though infants may be at special risk from fast-rising floods and strong currents, many such children died not during the onset of flooding but when floodwaters were well established. According to the study, many victims were from small households and had been left at home without adequate supervision for long periods while parents were earning a livelihood from fishing.

The Save the Children study called for a more accessible and affordable system of kindergartens for pre-school aged children. Indeed, from 2002 onward the Government of Vietnam has started to establish emergency 'flood kindergartens' in the Mekong Delta, where parents can leave young children in safety while they concentrate on securing houses, possessions and livelihoods. Independent assessment of the effectiveness and usage of these centres is not yet available. However, the Government claims that the 918 emergency kindergartens set up during the severe floods of 2002 drastically reduced the number of children who drowned that year.

Disasters are Rooted in Development Failure

Dominant Development Models and Risk

Armed conflict and disaster risk

In 2002 violence and armed conflict led to approximately 22 million international refugees and another 20 to 25 million internally displaced people. The social disruption and dislocation of governance systems caused by armed conflict and high levels of social violence (for example in urban neighbourhoods dominated by drugs gangs) influences the capacity of households and communities to withstand natural hazard and to recover from disaster. The Horn of Africa is one region in which food insecurity and famine has been particularly associated with potent mixes of conflicts and drought over the last 30 years. In the last five years at least 140 'natural' disasters have occurred in countries experiencing complex political emergencies.⁴⁵

People displaced by conflict often add to the swelling populations of urban informal settlements, or find themselves in refugee camps. Lack of adequate livelihood resources in these new settlements can magnify risk as the immediate environment is exploited for resources such as firewood leading to soil loss and potentially increasing flood or landslide hazard. Inside camps and informal settlements high density living increases exposure to disease.

The disruption or absence of government functions or diversion of public expenditure during periods of conflict can have an erosive effect on disaster risk capacity. The January 2002 volcanic eruption of Mount Nyiragongo in Goma, Democratic Republic of Congo, was predicted by a local geologist, but with no state capacity to act on this information no warning or preparedness measures were taken, and almost half of the city was destroyed.

Disaster can also play a role in generating social instability and political change. The collapse of the Somoza regime in Nicaragua, the undermining of community level organisations in Chile and political change in Ethiopia and Afghanistan have all been associated with social tensions catalysed during moments of disaster stress. On the ground it is often difficult to separate out the cause and effect relationships between natural disaster, social instability or inequality and conflict or political crisis.

Development Can Lead to Disasters by Increasing Exposure to Hazard

Adapting to climate change

It is widely agreed by the scientific community that climate change is already a reality, and likely to bring an increase in the frequency and severity of weather-related disasters. When seasonal change and climatic extremes overlap the results can be catastrophic, as demonstrated in 2003 when heat waves killed 2000 in India and as many as 20,000 across Europe.

Climate change will hit the poor hardest. The greatest impacts of climate change are likely to be on food security, the productivity of agricultural export crops, human health, water security and quality, and through the displacement of people as a result of flooding, drought or sea level rise. In Africa, sea level rise alone is estimated to increase those at risk from flooding from 1 million to 70 million by 2080. In India, where water tables are already falling rapidly in many areas due to overexploitation of groundwater, a temperature rise of 2°C could lower yields of wheat and rice by 10%, adding to the effect of increased rainfall variability.

The slow pace of the UN Framework Convention on Climate Change negotiations means that adaptation measures need to proceed alongside ongoing plans for climate change mitigation. Action is required to reduce the likely human impact of changes in climate as well as to reduce the process of change itself. Indeed, there are opportunities for combined adaptation/mitigation projects, such as the (re-) establishment of mangrove forests in high-risk, low-lying coastal areas. This is adaptive in reducing exposure to flooding and storm surge, as well as furthering mitigation through tree growth acting as a carbon sink.

Adapting to climate change will mean adjustments to risk bearing and sharing between individuals, civil society and the State, and will not depend solely on international action in this area. Such action needs to be part of a broader development policy focus to support the adaptive capacity and resilience of vulnerable communities.

Climate change adds weight to the argument for integrating risk reduction into development. Where risks are known to be high, for example on floodplains or low-lying coasts, existing disaster risk reduction programmes should be expanded.

Elsewhere, uncertainty increases the need for precautionary development that takes disaster risk into account. The Netherlands Red Cross Climate Change Centre has built on disaster risk reduction tools to offer guidance for national societies on local adaptation to reduce climate change risks. DFID has also recently produced a collection of key sheets, which demonstrate how climate change increases environmental risk for the poorest, putting the MDGs at risk.

Vicious cycles of urban risk

Rapid urbanisation in the 1990s and beyond has dramatically increased the numbers of people and scale of physical assets exposed to hazards (particularly earthquakes and flooding) because of inadequate urban land-use planning and construction standards. There are large numbers of urban residents living below poverty lines and close to the point of household collapse in cities of middle and low developed countries - often more than 50% of a city's population. The dependence of urban livelihoods on a money economy and reliance on infrastructure networks to deliver basic needs also heightens the susceptibility to disaster.

The high density of urban slums magnifies the number of people and assets at risk from any one event. In the densely populated Delhi slum of Yamuna Pushta, a single small fire quickly ran out of control and destroyed 2,000 squatter homes in November 2002. The inability of Cape Town municipality to support secure low-income living conditions contributed to over 10,000 informally constructed homes being destroyed by fire from 1995 to 1999.

Not only are the poor affected. In the January 2001 earthquake in Gujarat, India, poor planning and failure to enforce building codes in a rapidly urbanising area were directly responsible for unsafe buildings, which claimed 20,000 lives from all strata of society. Where wealth counted most was in ability to recover: those with assets and influence were able to secure housing in new locations and benefit most from rehabilitation assistance.

In worst-case scenarios such disasters are followed by inappropriate or partial recovery that only reproduces the socio-economic vulnerability for future disaster loss. Following urban disasters it is commonplace for residential areas to be re-developed either formally or informally on the same hazardous sites. In Rio de Janeiro, landslides caused 1000 deaths during storms in 1966, rising to 1700 in 1967 because of the redevelopment of hazard sites. For low income countries and regions, breaking out of such negative cycles may prove decisive in striving for sustainable poverty reduction.

Development Can Lead to Disasters by Increasing Susceptibility

Cultural change and vulnerability in small island states

Local knowledge needed to make coping and adaptive responses operational may be lost or become irrelevant following social change. This process has been observed in Fiji, with signs of dependence on food assistance from state and NGO sources replacing traditional coping measures such as the consumption of uprooted tubers. Similarly, there is evidence that rich and varied agro forestry systems of long standing in the Pacific islands are threatened by agricultural modernisation.

Coping strategies are further structured by the extent to which claims to customary rights from marginalised individuals are recognised. This 'moral economy' is susceptible to erosion by the extension of the market and the privatisation of communal resources, the penetration of the state into traditional social relations so that formal welfare replaces indigenous reciprocity and support systems, and population growth. In Western Samoa, for example, traditional coping mechanisms and agricultural practices have been undermined by the enhanced role of the market.

But not all change is bad! Customary interpretations of disasters as 'Acts of God' tend to disempower individuals and societies, limiting adaptations necessary to reduce vulnerability or hazard. Socioeconomic development that extends entitlements to information, livelihood resources and inclusive governance is likely to reduce disaster risk. The challenge on small island states, as elsewhere, is to promote development that improves human welfare without generating disaster risk.

Poorly Planned Attempts to Reduce Risk Can Make Matters Worse

A failed response to flooding risk: residential clusters in Vietnam

Disaster risk reduction efforts in Vietnam's Mekong Delta have many positive aspects, but government efforts since the mid-1990s to relocate low-income households in specially constructed safe (high ground) areas called 'residential clusters' have been conspicuously unsuccessful. According to one agency in Vietnam, residential clusters had been 'clumsily' implemented by some provinces from a narrowly sector driven perspective of disaster management. This resulted in low uptake of resettlement loans made available to households. By the end of 2002, 142 residential clusters had been completed, with planned space for 39,000 households; however only 3,000 households had actually moved in.

A report for CARE International suggests that many sites within the Delta for re-housing low-income households were initially created with inadequate sanitation, water and electricity provision, poor consideration of employment location and community composition, and no on-site public facilities. The report also suggests there was little effective community participation in their planning, construction and management. Some of these issues are now being addressed by the provincial governments.

Disaster Response Can Exacerbate Risk

International food aid has a vital role in humanitarian assistance programmes to save lives in the wake of disasters when there are problems of food availability. Under certain circumstances it can also be appropriate in the context of longer-term programmes to protect or help rebuild productive assets of those most vulnerable to disasters. Yet as a number of recent studies have shown, food aid has too often fallen short of these objectives or has been demonstrably counterproductive. In acute crises it has often arrived late or in insufficient quantities, and has subsequently impeded recovery through adverse effects on prices and incentives. Unless there is acute food availability shortfall or market failure, cash or other forms of non-food assistance are most often preferable to food assistance, and yet in both emergency humanitarian and recovery and safety net programmes it is non-food assistance that is most consistently under-resourced.

In Ethiopia's Somali Region a famine in 1999-2000, sparked by drought but with links to past and current regional conflicts, killed anywhere between 10,000 and 100,000 people. Humanitarian agencies were late on the scene and food aid became available only after the peak of human mortality had passed and tens of thousands of households in this pastoralist area had already lost their livestock and their livelihoods. When the relief operation did start, people flocked to temporary settlements on the outskirts of towns like Gode and other major distribution centres. Poor health and sanitation conditions there appear to have caused resurgence in child mortality. The humanitarian response was overwhelmingly food aid centred, and remained so. With little or no help for re-establishing their livelihoods many people stayed in Gode, trapped in a situation of food aid dependence - and were still there two or more years later. Some of the food aid was sold in local markets, where it undercut locally produced grain and undermined livelihoods of farmers and traders

Disaster Risk Reduction Can Be Cost Effective

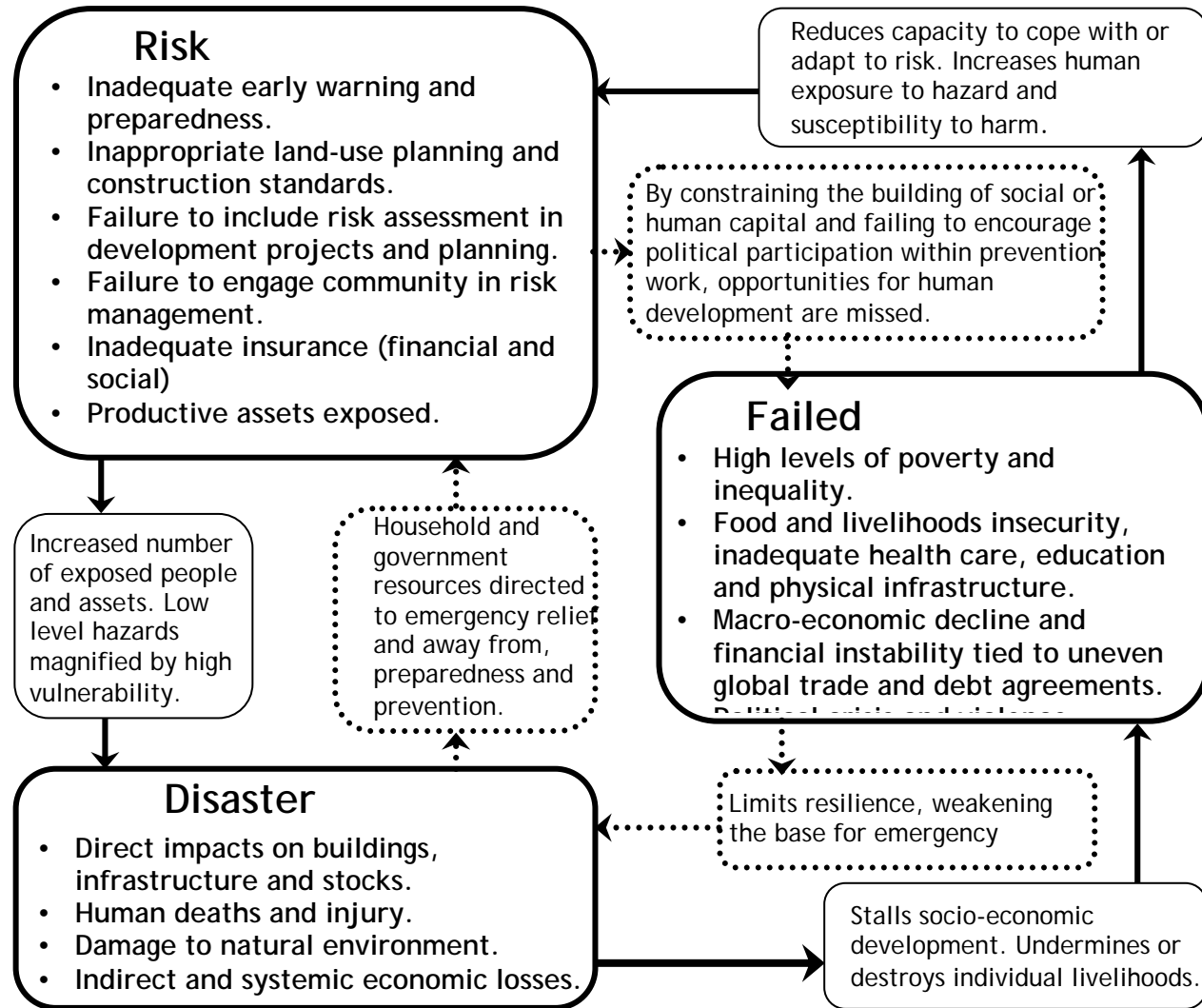
Cost -effectiveness of disaster risk reduction - some examples

- The World Bank and the US Geological Survey calculated that economic losses worldwide from disasters during the 1990s could have been reduced by US\$ 280 billion worldwide if US\$ 40 billion were invested in mitigation and preparedness.
- In China, investment of US\$ 3.15 billion in flood control measures over 40 years is believed to have averted potential losses of US\$ 12 billion.
- In Vietnam, 12,000 hectares of mangroves planted by the Red Cross protect 110 km of sea-dykes. Planting and protection cost US\$ 1.1 million but has reduced the cost of dyke maintenance by US\$ 7.3 million per year (and the mangroves have protected 7,750 families living behind the dyke).
- According to Oxfam, the value of cattle saved on a flood shelter of 4 acres in Bangladesh during the 1998 floods was as much as £150,000, against a construction cost of only £8,650.
- A study on Jamaica and Dominica calculated that the potential avoided losses compared with the costs of mitigation when building infrastructure like ports and schools would have been between two and four times. For example, a year after constructing a deepwater port in Dominica, Hurricane David necessitated reconstruction costs equivalent to 41% of the original investment; while building the port to a standard that could resist such a hurricane would have cost only about 12%.
- In Darbhanga district in North Bihar, India, a cost-benefit analysis of disaster mitigation and preparedness (DMP) interventions suggests that for every Indian rupee spent, 3.76 rupees of benefits were realised. The Net Present Value (NPV) of the project was calculated at £46,000.
- In the same district, a cost-benefit analysis of installing raised hand pumps less susceptible to flooding compared two scenarios - a 'without' scenario where government hand pumps were blocked each year by the silt and debris carried by the flood water and the pumped groundwater was contaminated, and a 'with' scenario where raised hand pumps did not become blocked. The benefit/cost ratio of raised hand pumps was calculated at 3.20 with a NPV of almost £3000.

What Disaster Reduction Can Contribute Towards Meeting the MDGs

MDG	Examples of what risk reduction can contribute
1. Eradicate extreme poverty and hunger	<ul style="list-style-type: none"> Disaster risk reduction and MDG1 are interdependent. Reducing livelihood vulnerability to natural hazards is key both to eradicating income poverty and improving equity, and to improving food security and reducing hunger. Reducing disaster impacts on the macro-economy will promote growth, fiscal stability and state service provision, with particular benefits for the poor. Disaster risk reduction and MDG1 share common strategies and tools: this overlap means that giving development more security from natural hazard can be very cost-effective.
2. Achieve universal primary education	<ul style="list-style-type: none"> In hazard-prone areas, the case for building schools and encouraging attendance becomes much stronger if buildings are safe and students and teachers are trained in emergency preparedness. Promoting safer structures may encourage better maintenance even in non-disaster times. Reduced vulnerability will allow households to invest in priorities other than mere survival. Education is often a high priority. Girls (as 60% of non-attendees) may benefit disproportionately.
3. Promote gender equality and empower women	<ul style="list-style-type: none"> Better risk reduction will help protect women from disproportionate disaster impacts. Collective action to reduce risk by households and communities provides entry points for women (and other marginalised social groups) to organise for other purposes too, providing a catalyst for economic and social empowerment.
4. Reduce child mortality	<ul style="list-style-type: none"> Disaster risk reduction will help protect children from direct deaths and injuries during hazard events (as exemplified in Box 5, p.24), and will lower mortality from diseases related to malnutrition and poor water and sanitation following disasters. Health infrastructure and personnel in hazard-prone areas will be better protected. This may also promote better maintenance of infrastructure.
5. Improve maternal health	<ul style="list-style-type: none"> Disaster-related illness and injury will be reduced. Improved household livelihood and food security will lower women's workloads and improve family nutrition. Health infrastructure and personnel in hazard-prone areas will be better protected. This may also promote better maintenance of infrastructure.
6. Combat HIV/AIDS, malaria and other diseases	<ul style="list-style-type: none"> Public health risks, e.g. from flood waters, will be reduced, and nutrition and health status improved, boosting resistance to epidemic disease. Fewer disasters will free up social sector budgets for human development. Livelihood security will reduce the need to resort to work in the sex industry. Community organisations and networks working in disaster risk reduction are a resource for family and community health promotion, and visa versa.
7. Ensure environmental sustainability	<ul style="list-style-type: none"> Reduced disaster-related migration into urban slums and reduced damage to urban infrastructure will improve urban environments. An emphasis on governance for risk reduction and more secure livelihoods will help curb rural and urban environmental degradation. Risk reduction partnerships that include community level actors and concerns will offer more sustainable infrastructure planning, and enable expansion of private sector contributions to reducing disasters. Housing is a key livelihood asset for the urban poor. Disaster risk reduction programmes that prioritise housing will also help preserve livelihoods.
8. Develop a global partnership for development	<ul style="list-style-type: none"> Creating an international governance regime to reduce risk from climate change and other disasters will help overcome disparities in national negotiating weight. Efforts to build equal global partnerships for risk reduction will have particular relevance for small island developing states and HIPC. Disaster risk reduction initiatives could promote better public-private partnerships.
ALL MDGs	<ul style="list-style-type: none"> Reducing disaster impacts will free up resources, including ODA, to meet MDGs.

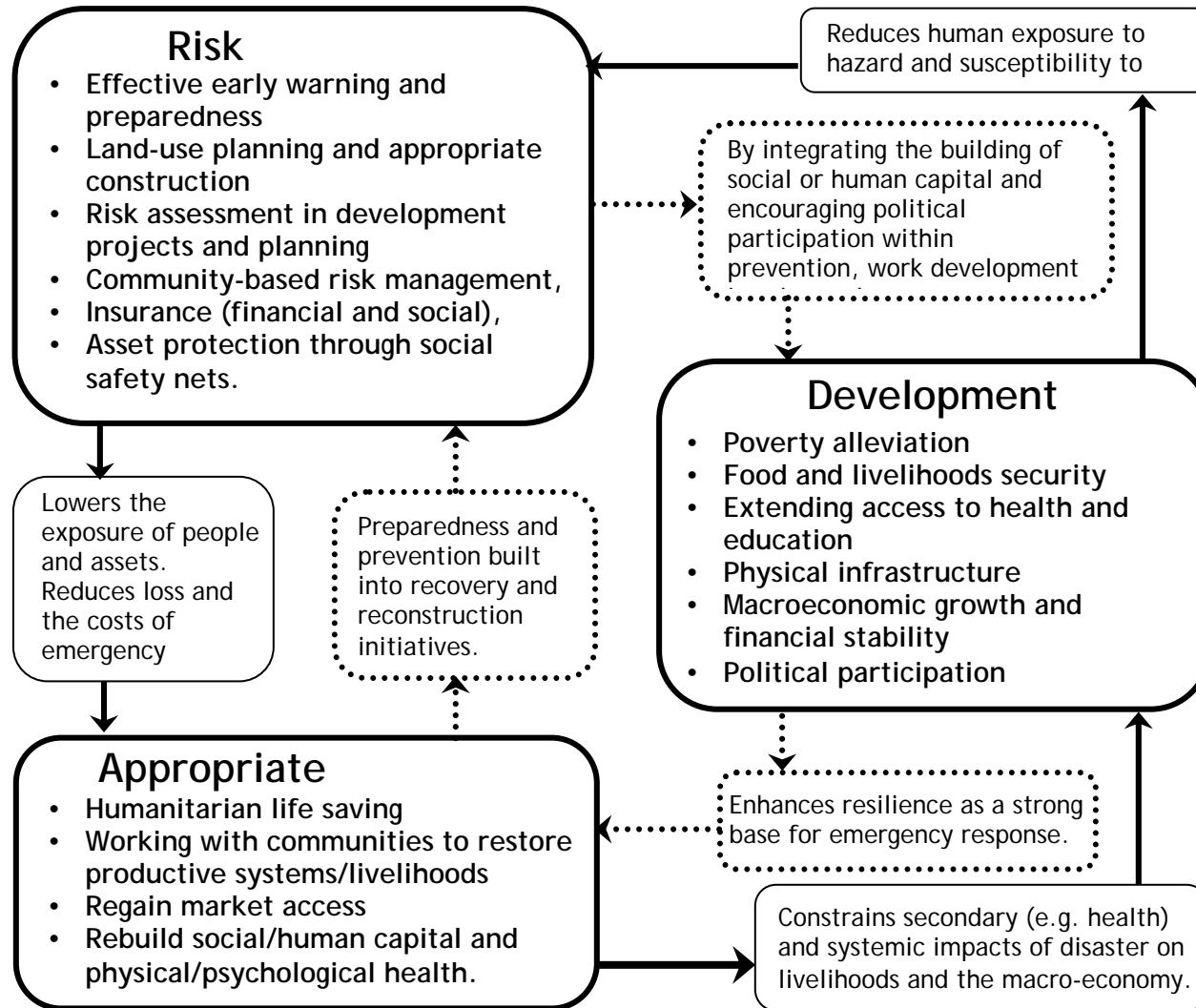
From Vicious Spirals of Disaster Prone Development



Anticlockwise:
Development failure undermining capacity to cope and increasing exposure to hazard

Clockwise:
Failed development undermining national capacity to respond strategically to disaster impacts

To Virtuous Spirals of Disaster Risk Reduction



Anticlockwise:
Development mainstreams DRR to minimise exposure and susceptibility

Clockwise:
Development provides a basis for strong emergency response and unique opportunity to reinforce DRR in reconstruction

Reading and References

[UNDP, Reducing Disaster Risk: A Challenge for Development.](#)

- Executive Summary (p. 1)
- Chapter 1: Development at Risk (p. 9)

[DFID, Disaster Risk Reduction: A Development Concern. A scoping study on links between disaster risk reduction, poverty and development.](#)

- Chapter 3: Why should disasters be a development concern? (p. 19)
- Chapter 4: Why does development tend to overlook disaster risk? (p. 36)

[UNISDR, Living with Risk: A Global Review of Disaster Reduction Initiatives](#)

- Chapter 1: Living with Risk - Focus on Disaster Risk Reduction
 - 1.1 Setting the scene - understanding disaster risk reduction (p. 11)
 - 1.2 Context and processes linked to disaster risk reduction (p. 26)

[UNISDR, Natural Disasters and Sustainable Development: Understanding the Links between Development, Environment and Natural Disasters.](#) Background Paper No. 5 for World Summit on Sustainable Development (WSSD)