

Poverty Reduction Strategies

Guidance Note 3

Tools for Mainstreaming Disaster Risk Reduction is a series of 14 guidance notes for use by development organisations in adapting programming, project appraisal and evaluation tools to mainstream disaster risk reduction into their development work in hazard-prone countries. The series is also of relevance to stakeholders involved in climate change adaptation.

This guidance note addresses the issue of poverty reduction, providing information on the integration of disaster-related issues into the preparation of poverty reduction strategies (PRSs) and other poverty reduction initiatives in hazard-prone countries and the identification of 'win-win' opportunities for reducing poverty and strengthening hazard resilience. It is intended for use by national governments in preparing PRSs and by international development organisations in supporting governments in this process.

1. Introduction

Since the late 1990s, poverty reduction has become the principal objective of development strategies in many developing countries. This shift in emphasis has been in part spearheaded by the Poverty Reduction Strategy initiative, which was launched in 1999 by the World Bank and the International Monetary Fund (IMF) to complement the Heavily Indebted Poor Countries (HIPC) initiative. Under the initiative, qualifying countries are required to produce and implement Poverty Reduction Strategy Papers (PRSPs) in order to obtain permanent debt relief. By 2005, the PRSP had become the primary tool in nearly 60 low-income countries for articulating poverty reduction and growth strategies.¹ The international development community, including international financial institutions, United Nations (UN) agencies, bilateral donors and non-governmental organisations (NGOs), have expressed strong support for this PRS process and increasingly use country PRSPs as the basis for designing their own programmes of assistance and coordinating with governments and other development partners.

PRSPs outline a country's macroeconomic, structural and social policies and programmes to reduce poverty and promote pro-poor growth. They are nationally owned documents prepared by individual governments, based on a detailed and thorough analysis of poverty and strategies for supporting pro-poor growth and drawing on extensive consultations with key stakeholders, including civil society and the private sector.

The rising importance attached to poverty reduction has been influential in thrusting disaster risk management up the agenda as exposure to risk and income shocks, including those emanating from natural hazards, is widely acknowledged as one of the fundamental dimensions of poverty (see Box 1).² In theory, economic growth and poverty reduction could, of themselves, reduce the vulnerability of the poor to natural hazards, with no explicit risk reduction strategy required. However, this ignores the facts that vulnerability is both a cause and a symptom of poverty, implying that gains in poverty reduction may be unsustainable if disaster risk is not tackled, and also that the development process can influence vulnerability negatively as well as positively. Win-win solutions for reducing poverty and strengthening hazard resilience therefore need to be identified and pursued.

¹ World Bank. *Toward a Conflict-Sensitive Poverty Reduction Strategy: Lessons from a Retrospective Analysis*. Report No. 32587. Washington, DC: World Bank, 2005. Available at: http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&theSitePK=523679&entityID=000160016_20050714160728&searchMenuPK=64187283&theSitePK=523679

² See, for instance, World Bank (2002).

Box 1 Poverty and disasters

Poverty and vulnerability to natural hazards are closely linked and mutually reinforcing. Disasters are a source of hardship and distress, potentially temporarily forcing certain groups below the poverty threshold and also contributing to more persistent, chronic poverty. Disasters can result in the loss of lives, homes and assets, disrupt livelihood opportunities, schooling and provision of social services, erode savings and create health problems, sometimes with long-term consequences. Disasters can also disrupt ongoing poverty reduction activities and force a diversion of related financial resources into relief and rehabilitation efforts. Poverty can be further reinforced by deliberate risk-averting, ex-ante livelihood choices that poorer households may make. For example, poorer households may choose to forgo the potential benefits of higher yielding or more profitable crops in favour of more hazard-tolerant ones.

Poor and socially disadvantaged groups, in turn, are among the most hazard vulnerable, reflecting their social, cultural, economic and political environments – for instance, the substandard quality and, often, dangerous location of housing (e.g., on flood plains, riverbanks or steep slopes); lower levels of access to basic services, particularly for the rural poor and illegal squatters; uncertain ownership rights, reducing incentives to manage resources sustainably or invest in structural mitigation measures; often more vulnerable livelihoods; and limited access to financial resources, constraining their ability to diversify livelihoods and recover post disaster. The poor can also exacerbate their own risk where limited livelihood opportunities force over-exploitation of the local environment. Meanwhile, the covariate nature of natural hazards implies that there is limited scope for formal and informal community-based support systems in the aftermath of a disaster.

Current state of the art

An increasing number of PRSPs explicitly recognise that natural hazards and related vulnerability play a role in determining forms and levels of poverty and in influencing broader macroeconomic performance. Over 15 of them include related disaster risk management measures. However, these measures are typically very narrowly and traditionally conceived. For instance, they outline plans to strengthen warning systems and disaster response capabilities and to target relief and rehabilitation assistance towards the poor (e.g., Ghana, Malawi, Mozambique) and/or to strengthen the resilience of the agricultural sector (e.g., Malawi, Mozambique), for example by the adoption of improved seeds. Very few go that fundamental step further, seeking to integrate disaster risk management concerns into broader development strategies and programmes and to tackle it more holistically (notable exceptions include Bangladesh (see Box 2) and Cambodia). Moreover, there are some glaring omissions, involving highly disaster-prone countries where the impact of recent disaster events on levels of poverty may be mentioned in passing but there is no discussion of measures to reduce risk.

Various international initiatives are now under way to advocate for greater consideration of hazard-related issues in PRSPs in relevant countries and to develop tools and mechanisms to support this process. A number of development organisations are involved in these initiatives, including the United Kingdom's Department for International Development (DFID), the UN's International Strategy for Disaster Reduction (UN/ISDR), the United Nations Development Programme (UNDP) and the World Bank. The Hyogo Framework for Action 2005–2015, adopted by the World Conference on Disaster Reduction in January 2005 and signed by 168 nations and multilateral institutions, specifically calls for the integration of disaster risk reduction considerations into poverty reduction strategies.³

Box 2 An exemplary case: The 2005 Bangladesh PRSP

The Bangladesh PRSP is exceptional in both the importance it attaches to disaster risk management and the extent to which it seeks to integrate disaster risk management into broader development activities. Disaster risk management is not explicitly included as part of the four strategic blocks or four supporting strategies on which the PRS is based. However, the extent to which the PRS ensures comprehensive disaster risk management, environmental sustainability and mainstreaming of these concerns into the national development process is identified as one of ten key goals on which the success of the PRS will be judged.

³ UN/ISDR. *Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters*. World Conference on Disaster Reduction, 18–22 January 2005, Kobe, Hyogo, Japan. Geneva: United Nations International Strategy for Disaster Reduction, 2005, page 6, para 16 (i) (b). Available at: <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>

Sixteen policy matrices were developed as instruments through which the PRS would be operationalised, also including one specifically on comprehensive disaster management. This matrix outlines six strategic goals:

- To mainstream disaster management and risk reduction into national policies, institutions and the development process, including the introduction of a disaster impact and risk assessment to be undertaken in preparing new projects.
- To strengthen disaster management and risk reduction institutional capacity.
- To strengthen knowledge management, including with regard to sharing and applying information.
- To enhance community-level capacity for disaster risk reduction.
- To ensure social protection of vulnerable groups.
- To strengthen governance in the area of disaster risk management.

Various disaster risk management goals and actions are also included under other policy matrices, including flood protection; strengthening of flood forecasting and warning systems and predictive capacities for other natural hazards; and various programmes to support those affected by disasters, for example through the provision of humanitarian relief, loans for small businesses and housing.

Factors underlying this emphasis on disaster risk management in the PRS include the high frequency of disasters in Bangladesh, affecting considerable segments of the population; strong recognition within the country of the need for a shift in weight from disaster response and recovery to a more comprehensive risk reduction approach; and the prior development of a five-year Comprehensive Disaster Management Programme (2004–2008) aimed at achieving this shift.

Advocated good practice

Four essential actions are required as part of the preparation of a PRS to ensure that disaster risks are adequately assessed and managed:

- An early assessment of vulnerability to natural hazards should be undertaken in hazard-prone countries.
- Rational, informed and explicit decisions should be taken on whether and how to address significant risks.
- The role of disasters and associated risks in contributing to other characteristics of poverty and their potential implications for the achievement of related strategic objectives should be carefully explored.
- Post-disaster support should be planned ahead of time to support both rapid recovery and enhanced resilience to future events, particularly of the poor.

This guidance note outlines detailed measures for ensuring that these actions are accomplished.

2. Basic steps in merging disaster risk concerns into the PRS process

The scope and emphasis of PRSPs vary between countries, reflecting different social, economic, financial, political and natural environments. However, a broadly similar preparation process is followed. Measures required to ensure that natural hazards and related vulnerability are adequately and systematically examined and addressed at each step in this process are outlined below. These measures, particularly those described in Step 1, are also relevant in undertaking poverty assessments and developing poverty reduction programmes and pro-poor policies in non-HIPC countries.

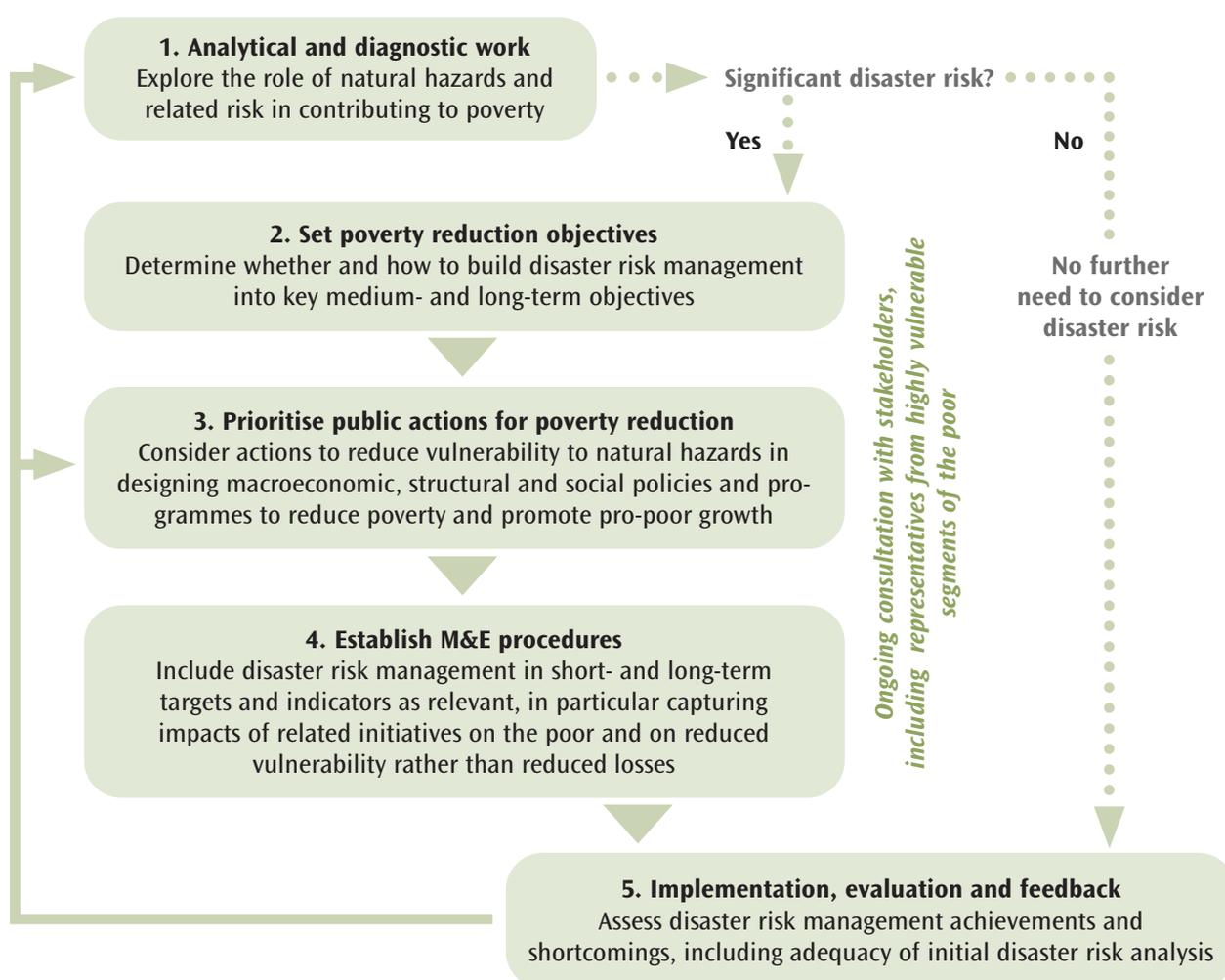
Step 1. Analytical and diagnostic work

Consider the role of vulnerability to natural hazards as part of the broader analysis to identify the poor, analyse the severity of poverty, identify correlated factors and underlying determinants, and examine the constraints and priorities of the poor.

In hazard-prone countries, the assessment should seek to establish which segments of the population are particularly vulnerable to natural hazards and what the implications are for levels and forms of poverty. Specific points to consider include:

- Types, magnitude, scale and probabilities of hazards faced in different parts of the country. As a first step it may be helpful to superimpose spatial hazard maps (see **Guidance Note 2**) on poverty maps, assuming both are available.
- Factors contributing to vulnerability (e.g., occupation, type and location of housing, access to credit and social safety nets). The analysis should differentiate between groups because forms and levels of vulnerability can vary enormously (for instance, between income groups, geographical areas, rural and urban areas, male- and female-headed households, ethnic groups and communities facing different types of hazard).

Figure 1 Integration of disaster risk concerns into a poverty reduction strategy



- Potential direct and indirect consequences of disasters for levels of income and well-being of different groups (e.g., in drought-prone, rural areas, droughts can increase the time required to collect water, with consequences for remunerative activities).
- Strategies to minimise disaster risk and their implications for income (e.g., choice of crops grown).
- Strategies to cope with and recover from disaster events (e.g., changes in crop production, income diversification, increased use of common property or open access resources, withdrawal of children from school, distress sale of assets), their implications for levels of poverty and related constraints to recovery (e.g., restricted access to credit).
- Role of past disaster risk management and poverty reduction strategies in influencing forms and levels of vulnerability, both positively and negatively.

- Impact of past macroeconomic policies and structural reforms on vulnerability to natural hazards, particularly of the poor (see **Guidance Notes 4 and 8**).
- Impact of past disasters on levels and forms of poverty, including associated movements in and out of poverty (see Box 3). Has post-disaster support benefited the poor and has it been appropriate to their needs?
- Implications of changes in vulnerability over time (e.g., due to rapid economic growth (see below) or the spread of HIV/AIDS) for the effectiveness of formal and informal disaster risk management strategies. The implications of climate change also need to be considered, exploring the resilience of the poor in the face of increasingly frequent and intense climatological hazard events.

Box 3 Living near the edge: Disasters and the ‘near-poor’

Strategies to reduce vulnerability need to take into account the needs of the ‘near-poor’, as well as the poor, as disasters can force additional people into poverty. For instance:

- In El Salvador, the two earthquakes in 2001 led to an estimated 2.6–3.6 per cent increase in poverty.⁴
- In Honduras, the percentage of poor households increased from 63.1 per cent in March 1998 to 65.9 per cent in March 1999 as a consequence of Hurricane Mitch in October 1998. The number of rural households living in extreme poverty or indigence rose by 5.5 percentage points.⁵
- In Vietnam, it is estimated that a further 4–5 per cent of the population could be pushed into poverty in the event of a disaster.⁶
- In Aceh, Indonesia, the 2004 tsunami is estimated to have increased the proportion of people living below the poverty line from 30 per cent to 50 per cent.⁷

Regressions of fluctuations in levels of poverty against the incidence of hazard events (or an appropriate proxy such as fluctuations in staple crop yields or deviations from mean rainfall) can be useful in determining the extent of vulnerability of the poor and near-poor to natural hazards. Quantitative data collated to compile poverty profiles can also provide key information in helping to determine underlying causes. If sufficient, disaggregated data are available, variations in income or consumption of the different groups over time can be taken as proxies for vulnerability and regressed against factors such as occupation, asset holdings and gender of household heads to explore factors determining vulnerability. However, vulnerability is complex and requires additional qualitative analysis using tools such as sustainable livelihoods and vulnerability and capacity analyses, even where quantitative data are available, to ensure development of appropriate strategies to strengthen resilience (see **Guidance Notes 9, 10 and 11**). Any such existing analysis and case evidence on the impact of recent disasters on the poor should be sought to help support this process and minimise further work.

Step 2. Set poverty reduction objectives

Use the findings of Step 1 to determine whether and how to build disaster risk management into the key medium- and long-term objectives.

There is no right or wrong way to do this. There may be a strong rationale, for instance, for including disaster risk reduction as a sectoral or sub-sectoral goal, rather than a primary objective even in a high-risk country (see Box 4). However, it should be borne in mind that a wide, eclectic range of factors can determine vulnerability to natural hazards and that a broad perspective should therefore be maintained in trying to explore the best ways of tackling it, rather than being forced by the targets and objectives set to seek solutions categorised by sector.

⁴ World Bank. *Memorandum of the President of the International Bank for Reconstruction and Development and the International Finance Corporation to the Executive Directors on a Country Assistance Strategy for the Republic of El Salvador*. Report No. 22932 ES. Washington, DC: World Bank, Central America Country Management Unit, Latin America and the Caribbean Region, 2001. Available at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDS/IB/2001/11/28/000094946_01110804162761/Rendered/PDF/multi0page.pdf

⁵ Honduras PRSP. Available at: http://povlibrary.worldbank.org/files/Honduras_PRSP.pdf

⁶ ADB et al. *Vietnam Development Report 2004*. Joint Donor Report to the Vietnam Consultative Group Meeting, Hanoi, December 2–3, 2003. Hanoi: Asian Development Bank, Australian Government’s Overseas Aid Program, UK Department for International Development, Gesellschaft für Technische Zusammenarbeit (GTZ), Japan International Cooperation Agency, Save the Children UK, United Nations Development Programme and World Bank, 2004. Available at: <http://www.worldbank.org.vn/news/VDR04%20Poverty.pdf>

⁷ DFID. *Reducing the Risk of Disasters – Helping to Achieve Sustainable Poverty Reduction in a Vulnerable World: A Policy Paper*. London: Department for International Development (UK), 2006. Available at: <http://www.dfid.gov.uk/pubs/files/disaster-risk-reduction-policy.pdf>

Box 4 Practices in incorporating disaster risk management into PRS objectives

In practice, disaster risk reduction is rarely, if ever, selected as a key PRS objective. However, it has been incorporated into other PRS objectives in various ways:

- Disaster risk reduction has been identified as an issue under other key priorities such as a general reduction in vulnerability (e.g., Cambodia, Ghana, Malawi, Nicaragua (2001), Vietnam).
- It has been identified as a secondary priority, complementing achievement of selected primary goals (e.g., Mozambique).
- Some aspect of disaster risk reduction has been implicitly prioritised through other sub-goals, for instance to reduce the general vulnerability of agricultural activity (e.g., Burkina Faso).
- It has been included as part of sectoral sub-priorities (e.g., Laos (under Agriculture) and Tajikistan (under Environment and Tourism)).

Step 3. Prioritise public actions for poverty reduction

In high-risk countries, consider actions to reduce vulnerability to natural hazards in designing macroeconomic, structural and social policies and programmes to reduce poverty and promote pro-poor growth and in allocating public resources. Selected disaster risk reduction measures should be appropriate and feasible according to the findings of Step 1 above, key PRS objectives, estimated costs and benefits of the various disaster risk reduction options, available resources, institutional capacities and the effectiveness of past disaster risk reduction measures. The positive and negative impacts of other poverty reduction actions on hazard resilience, and their own vulnerability to hazard events, should also be explicitly considered.

Sectoral policies and programmes. There are a wide range of potential measures to reduce vulnerability to natural hazards, such as the development of drought- or flood-tolerant, short-cycle and relatively high-yielding crop varieties; expansion of irrigation networks; support to promote the growth of disaster-related microinsurance schemes (e.g., weather derivatives as currently being introduced in Mongolia to support herders); hazard-proofing of critical pro-poor social and productive infrastructure; and the development of early warning systems.⁸ There are also a number of mechanisms that can be pre-designed for responding to disaster events (Box 5). In selecting and designing these various measures, it is important to consider whether they will be pro-poor – for instance, whether sea defences will favour locations occupied by lower-income groups or whether poor households will have the skills and resources to access and utilise warning systems effectively. In view of financial constraints, low-cost measures should be particularly emphasised, such as community-based disaster risk management programmes, which could potentially provide solutions that are both sustainable and, if determined inclusively, sensitive to the needs and existing coping strategies of the poor.

Box 5 Post-disaster social safety nets

Publicly funded social safety nets may be needed to support poor households during and after a disaster, providing humanitarian relief, supporting the recovery of livelihoods and helping to ensure that poor households are not forced into further poverty (e.g., via the erosion of assets). Recent analysis for Ethiopia and Honduras, for instance, indicates that a safety net meeting basic food needs and, in some cases, minimal cash income can allow the chronically poor to divert efforts from survival-type coping strategies (such as distress sale of remaining productive assets) to more remunerative activities that might build assets and increase earnings.⁹

These safety nets should be established ahead of time, carefully targeted towards the poor and designed to support rapid recovery and, where possible, enhanced resilience to future hazard events. They should seek to complement, rather than undermine, household coping strategies and ensure that existing inequalities are not exacerbated (e.g., by only supporting licensed and registered operators). They should also be sensitive to the fact that some segments of the poor may be relatively hazard-resilient (for instance, urban unskilled factory workers) while some segments of the non-poor, such as farmers, may be highly vulnerable, temporarily falling into poverty as a consequence of a disaster and so potentially requiring targeted support.

⁸ For a much fuller discussion of possible measures, see UN/ISDR, *Living with Risk: A Global Review of Disaster Reduction Initiatives*. Geneva: United Nations International Strategy for Disaster Reduction, 2004. Available at: http://www.unisdr.org/eng/about_isdr/bd-lwr-2004-eng.htm

⁹ Carter, M.R., Little, P.D., Mogues, T. and Negatu, W. *Shocks, Sensitivity and Resilience: Tracking the Economic Impacts of Environmental Disaster on Assets in Ethiopia and Honduras*. University of Addis Ababa, University of Kentucky and University of Wisconsin, 2004. Available at: <http://ideas.repec.org/p/wpa/wuwpdc/0511029.html>

The appropriate type of safety net measure implemented will depend on the nature of the hazard experienced, the characteristics of affected poor households and the impact of the event. Possible options include:

- One-off cash or quasi-cash grants to help replace lost assets (e.g., livestock), rebuild livelihoods and protect remaining assets.
- Support to microfinance institutions to withstand disaster-induced liquidity pressures and to extend loans to disaster victims.
- Public works programmes to create employment, targeting the poor via low wage rates.
- Fee or tax waivers, such as waiver of certain agricultural taxes, school fees or health-care charges.

In high-risk areas, implications for vulnerability to natural hazards should also be considered in determining other strategies and programmes for reducing poverty. This is important both to help ensure that the full benefits and costs of different options are captured, including potential trade-offs between the achievement of PRS objectives and risk reduction, and to provide some overview of the expected net impact of a PRS on vulnerability to natural hazards, particularly for the poor. For example:

- Improving rural road networks can open up markets for new crops and non-agricultural products, potentially facilitating diversification of income into less hazard-vulnerable activities and improving access to disaster-affected rural communities.
- Expanding credit availability for the poor can similarly support income diversification into more hazard-resilient activities.
- Improving solid waste collection can reduce risk of flooding in urban slums.
- Or, on the negative side, promotion of fisheries can lead to environmental degradation, reducing protection against natural hazards. (See also Box 6.)

Box 6 Ensuring poverty reduction does not exacerbate disaster risk

UNDP and UN/ISDR have developed a matrix highlighting ways of ensuring that individual sectoral contributions towards the achievement of the Millennium Development Goals (MDGs), which are closely aligned to poverty reduction objectives, do not exacerbate disaster risk (UNDP and UN/ISDR, 2006). For instance, in relation to MDG 1, Target 1, which aims to halve the proportion of people whose income is less than US\$ 1 a day by 2015, the matrix includes the following points:

- *Agriculture*. While increasing agricultural productivity to raise the incomes of the rural poor and generate rural jobs, it is critical to provide for drought-resistant cropping strategies, including contingency cropping patterns to match late or early rains, floods or droughts, closely linked to meteorological monitoring and forecasting.
- *Water and sanitation*. While improved water supply for productive activities can raise economic growth through agriculture, urban manufacturing and service sectors, care has to be taken to ensure balanced utilisation of groundwater, ensuring that extraction does not exceed the rates of recharge and that impacts of future droughts are not exacerbated.
- *Slum upgrading and urban planning*. While providing security of tenure can improve labour market participation and access to credit markets, care has to be taken to enforce and apply land use by-laws that are consistent with hazard risk mapping. Urban infrastructure, including transport systems, is necessary for establishing manufacturing and service industries, but should be made hazard resilient through retrofitting and strengthening to conform to assessed hazard risks.
- *Transport*. Roads, railroads and ports lower transport costs and thereby increase the real incomes of the poor, but transport systems need to be made hazard resilient.

By highlighting interventions required by different sectors, this matrix supports government ministries/departments and NGO counterparts in understanding their responsibilities in relation to potential trade-offs between disaster risk and poverty reduction and in identifying required disaster risk reduction interventions. UNDP and UN/ISDR plan to extend this work further to provide more specific sectoral guidance.

Ideally, all potential options for reducing poverty should be quantitatively analysed to determine how to allocate resources. Where cost-benefit analysis is used, any significant direct and indirect disaster risk-related costs and benefits of each option should preferably be captured (see **Guidance Note 8**). In practice, cost-effectiveness analysis is

often more feasible, entailing the comparison of unit costs (in terms of cost per poor person or household served) of achieving different intermediate outcomes. In such cases, it is more difficult to take disaster risk reduction benefits into account quantitatively, except where they affect unit costs. However, disaster risk-related costs and benefits should be qualitatively considered in making the final selection of options. This selection is ultimately an informed matter of judgement.

Macroeconomic and structural policies. Economic growth is widely identified as the single most important factor influencing reductions in poverty, with macroeconomic stability, in turn, considered essential for high and sustainable growth.¹⁰ However, disasters can cause significant macroeconomic instability, disrupting productive activities, causing a deterioration in fiscal and external trade balances and reducing both short- and medium-term rates of growth (see **Guidance Note 8**). Moreover, economic growth does not necessarily imply a decline in vulnerability to natural hazards. In the earlier stages of economic development, disasters can actually exacerbate vulnerability, both for individual vulnerable groups and for the broader macroeconomy (see **Box 7** and **Guidance Note 14**). In high-risk countries, macroeconomic policies should, therefore, take vulnerability to natural hazards into account, considering the relative vulnerability of different sectors in promoting growth and exploring win-win options for strengthening hazard resilience and securing sustainable economic development. Projections of future growth performance, poverty reduction achievements and resources available for public expenditure also need to be realistic, taking into account the impact of possible disasters, in order to support successful development planning (see **Guidance Note 14**).

Box 7 Economic growth and hazard vulnerability

The relationship between the level of development of an economy and its vulnerability to natural hazards is hugely complex, reflecting the fact that development is a non-linear process with many different paths. However, as evidence confirms, during earlier stages of economic development, vulnerability can increase at both micro- and macroeconomic levels. Poor and socially disadvantaged groups can become more vulnerable as socio-economic change leads, for example, to the breakdown of familial support and traditional coping mechanisms, increasing reliance on monetary earnings rather than in-kind production and movements of people to occupy and seek livelihoods in more hazard-prone places. Moreover, during earlier stages of development, rapid urbanisation is typically unplanned; building and land use codes are poorly enforced; little regard is paid to the state of the environment; and natural resources, such as forests and groundwater, are exploited, exacerbating the impact of future hazard events (see **Guidance Note 7**). Meanwhile, growing sectoral, geographical and financial integration increases the indirect macroeconomic multiplier effects of adverse performance in a particular sector or region on the rest of the economy, potentially turning local crises into national ones.

At higher levels of development, disaster-related physical losses are much higher but the economic impacts of disasters decline again proportionately, in part due to increased investment in mitigation and preparedness measures, improved environmental management, greater access to financial resources and lower associated opportunity costs and to a reduction in the scale of absolute poverty and thus of household vulnerability. A greater share of private sector economic assets is also likely to be adequately insured against disaster and the burden diffused by global reinsurance.

Source: Benson, C. and Clay, E.J. *Understanding the Economic and Financial Impacts of Natural Disasters*. Disaster Risk Management Series, No. 4. Washington, DC: World Bank, 2004. Available at: http://www-wds.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&eid=000012009_20040420135752

*Governance.*¹¹ In high-risk countries, efforts to improve governance should include mechanisms to ensure that:

- appropriate policy frameworks exist to mainstream disaster risk reduction as a central element in development planning;
- strong institutional, legislative and regulatory arrangements and capacities are in place for disaster risk management;

¹⁰ See, for instance, World Bank (2002).

¹¹ See, for instance, UNDP, ProVention, UN-HABITAT and UNV (2005) for more in-depth discussion.

- there is adequate financial provision for disaster risk management, including appropriate financial planning for potential disasters (see below);
- all relevant stakeholders, including poor, vulnerable groups, participate in disaster risk management policy and decision-making;
- powerful interest groups do not subvert efforts to reduce hazard vulnerability of the poor;
- property rights of the poor are secure, encouraging investment in mitigation;
- the delivery of post-disaster support reaches those most in need;
- opportunities for related corruption are minimised (e.g., via well-designed and properly implemented financial controls and systems of accountability relating to the use of relief and reconstruction funds); and
- governments and other institutional actors are held to account for their disaster risk management decisions and actions.

Decentralisation is an important vehicle for mainstreaming disaster risk reduction, fostering local participation and empowerment and improving accountability. However, in order to ensure that local governments are able to fulfil their disaster management responsibilities, devolution of responsibilities must be accompanied with commensurate assignments of power and financial resources.

Recognition of potential problems of governance that disasters can create is also required, relating, for example, to the considerable pressure disasters can place on administrative systems and the disruption they can cause to processes of consultation and participation.

Costs, budget and financing. Disaster risk should be taken into account in allocating public resources, with appropriate provision made for disaster risk reduction and potential disasters (see **Guidance Notes 4 and 14**).

There is a tendency to finance disaster relief and rehabilitation efforts in part via the reallocation of previously committed development resources, disrupting the achievement of other objectives. Large-scale inflows of external relief and reconstruction assistance post disaster can also create absorptive problems, impacting on all areas of public expenditure. However, systems of prioritisation of expenditure, a broader element of good fiscal management, can play an important role in ensuring that key poverty reduction programmes are protected. If post-disaster expenditure occurs on a regular, annual basis, predesignated calamity funds should be established as well.

The use of medium-term expenditure frameworks is also important, helping to ensure that risk reduction needs are not entirely overshadowed by shorter-term, more immediate, but perhaps ultimately less important, demands.

Step 4. Establish monitoring and evaluation procedures

If a PRS is expected to contribute to improved disaster risk management, it should include relevant short- and long-term targets and indicators and related systems for monitoring and evaluating implementation and achievements, particularly impacts on the poor (see Box 8).

Ideally, indicators should be quantitative (with related baseline data from which to measure progress), precise, readily and affordably attainable, pertinent and sufficient to assess performance. It may also be relevant to use indicators disaggregated by geoclimatic or geophysical zones. Outcome indicators should be based on reduced vulnerability rather than reduced losses because a disaster may not occur over the life of the PRS. Disaster risk reduction outcomes should additionally be linked to the attainment of broader PRS objectives, including MDGs in the case of MDG-based PRSs.

It is also important to consider the potential consequences that disasters (and other shocks) could have on PRS implementation (via physical damage or reallocation of resources), impact and outcome, both to ensure that realistic indicators and targets are set and as a further check in ensuring that potential implications of disasters have been adequately considered and addressed. In high-risk countries, it may be more appropriate to include range, rather than point, or 'with' and 'without' disaster indicators and targets for all PRS objectives. (See **Guidance Note 13** for further discussion.)

Box 8**Monitoring and evaluation (M&E) indicators for disaster risk reduction**

Existing PRSPs include various input and output indicators for disaster risk reduction, for instance relating to planned expenditure on particular activities, the design and approval of relevant policies, delivery of training and the construction of structural mitigation infrastructure. A few, including those that seek to integrate disaster risk reduction concerns into broader development strategies and programmes, also set specific disaster-related outcome and impact indicators, in some cases measuring the achievement of disaster risk reduction indirectly through other output indicators (see also **Guidance Note 4**):

- The 2002 Vietnam PRSP, which aims to halve the number of people falling back into poverty due to calamities and other risks by 2010.
- The 2005 Bangladesh PRSP, under which implementation of a comprehensive disaster management programme is expected to contribute towards a 50 per cent decline in the number of people living below the poverty line, gainful employment and reduced loss of output, properties and lives.
- The 2002 Cambodia PRSP, which aims to reduce the area of agricultural land damaged by floods and droughts, the monetary value of flood losses and the number of people affected by drought.

Step 5. Implementation, evaluation and feedback

Assess disaster risk management achievements and shortcomings as part of the evaluation and draw on lessons learned to enhance the effectiveness of successor PRSPs. The evaluation should consider whether the original analysis of disaster risk was sufficient; whether disaster risks were appropriately and cost-efficiently addressed; the effectiveness and sustainability of related activities; whether PRS achievements and outcomes are potentially threatened by future hazard events; and how any disasters occurring over the course of the PRS have affected its outcome. These issues should be explored in evaluating PRSPs in all disaster-prone countries, whether or not disaster risk was explicitly addressed. (See **Guidance Note 13** for further guidance on evaluation.)

In the event of occurrence of a major disaster during implementation, it may be necessary to adjust a PRS. In such circumstances, any changes should be transparent and rational relative to the key objectives of the PRS.

Repeated step. Participatory consultation

Consultations on the contribution of disasters to problems of poverty and related options for strengthening resilience should be repeated several times during the preparation of a PRS, for instance, in providing supplementary information for use in the diagnostics work; in determining programmes of action; and in evaluation and lesson learning.

Known highly vulnerable groups, both poor and non-poor, should be included in this process to determine their concerns, including perceptions of risk, behavioural response and priorities in strengthening resilience. In particular, the views of female-headed households, the aged, the disabled and other potentially socially excluded groups should be explicitly sought as these groups are often particularly vulnerable to natural hazards.

Other stakeholders with relevant knowledge and expertise should also be consulted, including civil society organizations (who are often the most active in driving the risk reduction agenda), civil servants in relevant line ministries and departments (e.g., social welfare, agriculture, transport, health) in national and local government, specialist disaster-related public agencies, the private sector and academic and research institutions.

3. Critical factors for success

- *Prior recognition of the potential importance of disaster risk reduction.* Prior recognition of the likely significance of natural hazards and related vulnerability in contributing to poverty together with an appreciation of vulnerability as a development, rather than a humanitarian, issue are critical in ensuring that the topic receives adequate attention in the initial analytical and diagnostics work for a PRS and the related consultative process and, thus, in the resulting strategy itself.
- *Political will and accountability.* Governments and the international development community need to accept their accountability to the poor to reduce disaster risk by pledging their long-term commitment to risk reduction. Short-term returns may be very limited, assuming no hazard event, but longer-term paybacks can be substantial.

- *Technical support.* Clear, readily accessible guidance needs to be developed to support governments in analysing and addressing disaster-related aspects of poverty.
- *Advocacy capacity of vulnerable groups.* The views and needs of vulnerable groups need to be heard and understood. This is a potentially challenging task as such groups can be difficult to define and typically cannot be reached via a single entry point.
- *Cost minimisation.* Disaster risk concerns should be integrated into PRSs at minimum cost. Pooling of existing analysis on vulnerability to natural hazards and the impact of disasters on the poor would help reduce the cost of preparing PRSs. Giving due concern to disaster risk reduction in the design of other poverty-reduction measures, rather than treating risk reduction as a separate activity, could also help reduce implementation costs significantly.

Box 9 Hazard and disaster terminology

It is widely acknowledged within the disaster community that hazard and disaster terminology are used inconsistently across the sector, reflecting the involvement of practitioners and researchers from a wide range of disciplines. Key terms are used as follows for the purpose of this guidance note series:

A *natural hazard* is a geophysical, atmospheric or hydrological event (e.g., earthquake, landslide, tsunami, windstorm, wave or surge, flood or drought) that has the potential to cause harm or loss.

Vulnerability is the potential to suffer harm or loss, related to the capacity to anticipate a hazard, cope with it, resist it and recover from its impact. Both vulnerability and its antithesis, *resilience*, are determined by physical, environmental, social, economic, political, cultural and institutional factors.

A *disaster* is the occurrence of an extreme hazard event that impacts on vulnerable communities causing substantial damage, disruption and possible casualties, and leaving the affected communities unable to function normally without outside assistance.

Disaster risk is a function of the characteristics and frequency of hazards experienced in a specified location, the nature of the elements at risk and their inherent degree of vulnerability or resilience.¹²

Mitigation is any structural (physical) and non-structural (e.g., land use planning, public education) measure undertaken to minimise the adverse impact of potential natural hazard events.

Preparedness is activities and measures taken before hazard events occur to forecast and warn against them, evacuate people and property when they threaten and ensure effective response (e.g., stockpiling food supplies).

Relief, rehabilitation and reconstruction are any measures undertaken in the aftermath of a disaster to, respectively, save lives and address immediate humanitarian needs; restore normal activities; and restore physical infrastructure and services.

Climate change is a statistically significant change in measurements of either the mean state or the variability of the climate for a place or region over an extended period of time, either directly or indirectly due to the impact of human activity on the composition of the global atmosphere or due to natural variability.

¹² The term 'disaster risk' is used in place of the more accurate term 'hazard risk' in this series of guidance notes because 'disaster risk' is the term favoured by the disaster reduction community.

Further reading

ActionAid International and Ayuda en Acción. *People-Centred Governance: Reducing Disaster for Poor and Excluded People*. Policy Briefing for the World Conference on Disaster Reduction, Japan, January 18–22, 2005. Johannesburg and Madrid: ActionAid International and Ayuda en Acción, 2005.

Available at: http://www.actionaid.org/wps/content/documents/kobe_peoplecentredgov.pdf

AfDB et al. *Poverty and Climate Change: Reducing the Vulnerability of the Poor through Adaptation*. African Development Bank et al., 2003. Available at: http://povertymap.net/publications/doc/PovertyAndClimateChange_WorldBank.pdf

ALNAP and ProVention Consortium. *South Asia Earthquake 2005: Learning from previous recovery operations*. Active Learning Network for Accountability and Performance in Humanitarian Action and ProVention Consortium, 2005. Available at: http://www.alnap.org/publications/pdfs/ALNAP-ProVention_SAsia_Quake_Lessonsb.pdf

DFID. *Disaster risk reduction: a development concern – A scoping study on links between disaster risk reduction, poverty and development*. London: Department for International Development (UK), 2004.

Available at: <http://www.dfid.gov.uk/pubs/files/drr-scoping-study.pdf>

DFID. *Key Sheets on Climate Change and Poverty*. London: Department for International Development (UK), 2004.

Available at: <http://www.dfid.gov.uk/pubs/files/climatechange/keysheetsindex.asp>

GTZ. *Linking Poverty Reduction and Disaster Risk Management*. Eschbom: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, 2005. Available at: <http://www.zeneb.uni-bayreuth.de/downloads/en-linking-povred-drm.pdf>

UNDP and UN/ISDR. *Integrating Disaster Risk Reduction into CCA and UNDAF: Guidelines for Integrating Disaster Risk Reduction into CCA/UNDAF*. Geneva: United Nations Development Programme and United Nations International Strategy for Disaster Reduction Secretariat, 2006.

Available at: <http://www.unisdr.org/eng/risk-reduction/sustainable-development/cca-undaf/cca-undaf.htm#2-3>

UNDP, ProVention, UN-HABITAT and UNV. *Governance: Institutional and Policy Frameworks for Risk Reduction – Thematic Discussion Paper Cluster 1*. Paper prepared for World Conference on Disaster Reduction, 18–22 January, Kobe, Hyogo, Japan. Geneva, Nairobi and Bonn: United Nations Development Programme, Bureau for Crisis Prevention and Recovery, ProVention Consortium Secretariat, United Nations Human Settlements Programme and United Nations Volunteers, 2005.

Available at: <http://www.unisdr.org/wcdr/thematic-sessions/cluster1.htm>

World Bank. *A Sourcebook for Poverty Reduction Strategies*. Washington, DC: World Bank, October 2002. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20175742~menuPK:435735~pagePK:148956~piPK:216618~theSitePK:430367,00.html>

Individual PRSPs and other related documents can be downloaded at:

<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPRS/0,,contentMDK:20200608~pagePK:210058~piPK:210062~theSitePK:384201,00.html>

This guidance note was written by Charlotte Benson. The author would like to thank members of the project Advisory Group and the ProVention Consortium Secretariat for their invaluable advice and comments. Financial support from the Canadian International Development Agency (CIDA), the United Kingdom's Department for International Development (DFID), the Royal Ministry of Foreign Affairs, Norway and the Swedish International Development Cooperation Agency (Sida) is gratefully acknowledged. The opinions expressed are those of the author and do not necessarily represent the views of the reviewers or funding bodies.

Tools for Mainstreaming Disaster Risk Reduction is a series of 14 guidance notes produced by the ProVention Consortium for use by development organisations in adapting project appraisal and evaluation tools to mainstream disaster risk reduction into their development work in hazard-prone countries. The series covers the following subjects: (1) Introduction; (2) Collecting and using information on natural hazards; (3) Poverty reduction strategies; (4) Country programming; (5) Project cycle management; (6) Logical and results-based frameworks; (7) Environmental assessment; (8) Economic analysis; (9) Vulnerability and capacity analysis; (10) Sustainable livelihoods approaches; (11) Social impact assessment; (12) Construction design, building standards and site selection; (13) Evaluating disaster risk reduction initiatives; and (14) Budget support. The full series, together with a background scoping study by Charlotte Benson and John Twigg on *Measuring Mitigation: Methodologies for assessing natural hazard risks and the net benefits of mitigation*, is available at http://www.proventionconsortium.org/mainstreaming_tools



ProVention Consortium Secretariat

PO Box 372, 1211 Geneva 19, Switzerland

E-mail: provention@ifrc.org

Website: www.proventionconsortium.org