Integrating disaster reduction into development: recommendations for policy-makers

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POLICY BRIEF

Overview

Disasters occur when abnormal or infrequent hazard events impact on vulnerable communities, causing substantial damage, disruption and possible casualties and leaving the affected communities unable to function normally without external assistance. Natural hazards include floods, drought, cyclones, earthquakes, volcanic eruptions and landslides.

There has been a rapid escalation in the incidence of severe disaster events in recent decades. Total reported global costs have risen 15-fold over the past five decades, while numbers of people affected tripled between the 1970s and 1990s. Rising losses and associated increases in expenditure on post-disaster reconstruction have forced the issue of natural hazard risk management up the policy agenda of affected governments as well as multilateral and bilateral donors and non-governmental organisations (NGOs). Disasters are increasingly recognised as a potential threat to sustainable development, poverty reduction initiatives and the achievement of a number of the Millennium Development Goals.

Despite this, many development and humanitarian organisations remain reluctant to pursue risk reduction as a key objective, or even to protect their own projects against potential hazards. Instead, in the face of finite aid resources and high associated opportunity costs, rising human and financial losses have been accompanied by increasing demands for more evidence that mitigation 'pays'. In the meantime, development initiatives are damaged time and time again by disasters while aid resources already committed to further development initiatives are reallocated to finance rehabilitation efforts.

PROVENTION CONSORTIUM

Ironically, it may not cost a great deal to incorporate appropriate risk management measures into development projects. Moreover, as a new ProVention study concludes, many of the standard tools already used in designing projects – environmental appraisal, economic appraisal, vulnerability and social analysis, risk assessment and logframe analysis – could also be used to assess risks emanating from natural hazards and benefits of potential mitigation options. If thus applied, they could easily indicate projects at risk from natural hazards, provide detailed information on the nature and level of risk and ensure that appropriate mitigation measures are incorporated into project design, so improving aid effectiveness.

This policy brief outlines recommendations for integrating assessment of natural hazard-related risks in project design, appraisal and evaluation. Their uptake depends, of course, on demand for such tools, as well as effective dissemination and use. Related policies and strategies and strong commitment to risk reduction are critical in ensuring that the tools will be revised and applied with due effect.

Recommendations

Revising appraisal and evaluation guidelines

Collectively, existing project appraisal tools could allow project planners to explore hazard-related risks and the impact of a project on vulnerability from a range of perspectives. There is nothing intrinsically difficult about either appraising such risks or monitoring and evaluating mitigation measures if these tasks are approached thoughtfully and knowledgeably and resourced adequately. There are plenty of effective tools or methods that can be applied, covering physical, economic, environmental and social aspects of risk and vulnerability.

However, although existing guidelines on various forms of appraisal and on evaluation often cover risk in the broadest sense (relating to operational risks, financial risks, political risks and so forth), they typically contain few specific references to hazard-related issues. In consequence, natural hazards and related vulnerability are rarely considered in designing and appraising development projects, other than dedicated mitigation ones, even in high-risk areas.

Policy recommendations

Existing appraisal guidelines should be revised where necessary to provide more explicit guidance on consideration and analysis of disaster risks and options for reducing vulnerability.

Guidelines should stress that risks emanating from natural hazards should be considered as early as possible in the project process so that the design of a project can be adjusted accordingly at least possible cost.

In high-risk areas, natural hazards and related vulnerability should be assessed as a matter of course as part of the appraisal process for all projects, not merely those in certain sectors (e.g., agriculture).

Integrating hazard concerns into all forms of appraisal

Risk reduction is about more than physical exposure and technological solutions. Vulnerability is complex and multifaceted, requiring analysis and solutions from social, economic and poverty perspectives as well.

Policy recommendations

The first step in scoping the extent of natural hazard-related risk should be undertaken as part of the environmental review process, bringing together information on potential hazards and probabilities of occurrence and undertaking an initial vulnerability assessment. Ideally, country environmental analyses should also include collation of some basic hazard data at the national level that can be drawn upon as a starting point in determining whether natural hazard-related risks need to be considered.

Assessment of natural hazards and related vulnerability should then be assessed, where relevant, as part of all other forms of project appraisal. Projects in high-risk areas should also undergo a full environmental impact assessment.

Seizing post-disaster opportunities for risk reduction

Standard appraisal procedures are often waived for post-disaster rehabilitation projects, with the objective of speeding up the provision of assistance. Yet disasters create a golden opportunity to mitigate future losses, stimulating strong – but short-lived – political commitment and public will to reduce risk. This opportunity should not be foregone.

Policy recommendation

Waiver of standard scoping and design requirements for post-disaster rehabilitation projects should be reviewed. In appraising such projects, it is particularly important to factor in hazard-related risks and appropriate mitigation measures.

Managing less frequent, potentially severe impact events

Project appraisals focus on expected costs, impacts and achievements of a project over its expected life, normally no more than 25–30 years. Assessment of potential risks posed by major earthquakes and volcanic eruptions, which typically occur hundreds of years apart, can therefore present particular challenges. Probabilities of occurrence may be low, implying that they will be ignored in any quantitative risk analysis. However, there are strong ethical grounds for arguing that physical structures should be seismically proofed to sufficient standards to avoid loss of human life in the event an earthquake.

Policy recommendation

Safety concerns should form a central part of the appraisal process in scoping certain types of project (e.g., schools) in seismically active areas, where probabilities of the occurrence of hazard events are low but potential magnitudes high.

Building in stakeholder analysis

Different groups attach different values to various forms of risk. For instance, a national government and a local community may view the loss of a hospital very differently. Risks can also be highly localised, sometimes shifting rapidly over time (for instance, due to deforestation).

Policy recommendation

Stakeholder analysis should cover natural hazard-related issues, seeking to explore perceptions of risk by different groups and the weights they attach to various aspects as well as to determine the precise nature of localised risks in the immediate project vicinity and factors underlying any change.

Monitoring and evaluation

Monitoring and evaluation (M&E) is still relatively neglected in disaster reduction, at least in comparison to the development and humanitarian relief spheres. There is also still too much emphasis on assessment of activities and outputs, rather than impacts. Failure at the project planning stage to provide baselines and to clarify the structure of a project's objectives, outcomes, outputs and activities also handicaps evaluation by making it difficult to identify progress and causality.

Policy recommendations

Guidance should be developed on methods of collecting and analysing data for monitoring and evaluating risk reduction activities. In particular, guidance is required on the identification of appropriate indicators for the many different forms that disaster reduction can take.

A more systematic approach to collecting and sharing information and evaluation lessons would be highly beneficial in improving project quality by helping to overcome the problem of poor lesson learning within the disaster reduction 'community'.

Strengthening institutional capacity

Considerable work is required to strengthen communications, dialogue and the sharing of information on vulnerability and risk reduction initiatives and responsibilities within agencies. Aid personnel also need to be supported in increasing their knowledge and understanding of these issues. General awareness of their potential importance in determining the success and sustainability of projects is very low.

Policy recommendation

Development and humanitarian organisations should consider establishing some form of internal central expertise or focal point with responsibility for providing general guidance on appraising and addressing natural hazard-related risks. Some organisations have existing disaster risk management units or focal points that could perform this additional function.

Further reading

This briefing note is based on the following report:

Benson C, Twigg J 2004, *'Measuring Mitigation': Methodologies for assessing natural hazard risks and the net benefits of mitigation – A scoping study.* Geneva: ProVention Consortium, December. http://www.proventionconsortium.org

A synthesised version of the main report is also available:

Benson C, Twigg J 2004, *'Measuring Mitigation': Methodologies for assessing natural hazard risks and the net benefits of mitigation – A scoping study. Synthesis report.* Geneva: ProVention Consortium, December. http://www.proventionconsortium.org

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