

Helpdesk Research Report

Disaster risk governance at national and sub-national levels

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Question

Identify literature on the governance of disaster risk in low- and middle-income countries, at national and sub-national levels. Please provide a summary of the literature along with an annotated bibliography.

Contents

1. Overview
2. Defining disaster risk governance
3. Annotated bibliography
 - 3.1 General literature
 - 3.2 National governance
 - 3.3 Local governance
 - 3.4 Institutional arrangements
4. Additional references

1. Overview

Though the term disaster risk governance is rarely used, there is a large body of literature that relates to the governance of disaster risk in low- and middle-income countries with a focus on national or sub-national levels. This brief helpdesk research report identifies some of the most notable literature in this area and attempts to identify common conclusions.

‘Disaster risk governance’ can be defined as the way actors at all levels manage and reduce disaster and climate related risks (e.g. UNDP, 2013). Literature from closely related conceptual areas such as risk governance and disaster governance also provide insights into disaster risk governance.

A number of key points arise from the literature on disaster risk governance. From the general guidance literature notable points are:

- There are certain **key entry points** for mainstreaming disaster risk governance. These include policy development, institutional development, advocacy and knowledge, supporting implementation of measures and supporting broad participation.
- **Development and disaster risk are closely related** and impact each other in several ways. For example, development can lead to urbanisation which can present new disaster risks. Development initiatives should incorporate disaster risk considerations.
- **Climate change adaptation and disaster risk reduction/management are closely related**, as would be the governance processes and mechanisms in these areas.
- **Disaster risk governance relates to many levels and actors**. It involves the governance mechanisms and processes of national decision-makers, local communities as well as inter- and intra-governmental organisations.

From the literature focused on national level governance key points are:

- **Parliamentarians can and should play an important role** in improving governance for disaster risk.
- **More guidance is needed that delineates responsibility** between global, regional, national and local actors.
- There are **various monitoring mechanisms for identifying the degree of mainstreaming of disaster risk management** in governance arrangements. Examples include tracking budgets for disaster risk and evaluating national policies, planning processes, and decision-making.

From the literature focused on local governance key points are:

- **Decentralisation and capacity-building** of local governments, communities and networks is important to manage disaster risk.
- **Decentralisation, by itself, does not guarantee** greater efficiency, social participation or accountability in relation to disaster risk management, but can create conditions conducive to these.
- **Political commitment** from local and national actors is important to institutionalise effective disaster risk governance.

Finally, from the literature focused on institutional arrangements key points are:

- A number of **institutional arrangements affect disaster risk management decision-making**. These include incentive structures, information gaps and intra-governmental relations.
- Both **formal and informal institutions** help shape exposure, sensitivity and capacities of individuals, social groups and social-ecological systems to respond to disaster risk.
- **New legislation** on disaster risk management can be a key enabler of disaster risk reduction and management.
- **Other governance reforms** such as 'New Public Management' reforms can adversely impact disaster risk governance.

2. Defining disaster risk governance

In general there does not seem to be a universally accepted and used definition of disaster risk governance. A notable definition, however, is from the UNDP (2013) Issue Brief on Disaster Risk Governance:

'Disaster risk governance refers to the way in which the public authorities, civil servants, media, private sector, and civil society coordinate at community, national and regional levels in order to manage and reduce disaster and climate related risks' (UNDP 2013: 1).

There are also a number of terms related to disaster, risk and governance. There is a significant literature focused on '**risk governance**', for example. Risk governance has been used to describe the translation of the substance and core principles of governance to the context of risk and risk-related decision-making, where governance is understood to **describe the multitude of actors and processes that lead to collective binding decisions** (e.g. van Asselt and Renn, 2011). The literature on risk governance often relates to high-income countries and covers governance that relates to all types of risk, not just natural disasters.

Another related concept is **disaster governance**. Tierney (2012) argues that disaster governance is an emerging concept in the disaster research literature that is distinct from, but closely related to, risk governance as well as environmental governance. In particular she notes that disaster governance arrangements are shaped by forces such as globalisation, world-system dynamics, social inequality, and socio-demographic trends and nested within and influenced by overarching societal governance systems (Tierney, 2012).

Very little literature uses the term disaster risk governance, and consequently **this helpdesk research report takes a broad approach in relation to key terms used**. Literature has been included in this report that most matches the concept of disaster risk governance (based on the UNDP conceptualisation) or provides insight into this concept.

3. Annotated bibliography

The following section identifies material that provides insight into disaster risk governance. The material has been divided into general literature that relates to disaster risk governance; literature with a greater focus on national level governance; local governance (including urbanisation and communities); and institutional arrangements (which includes legal arrangements). These categorisations are somewhat arbitrary and many documents identified could fit into one or more of these categories. The material felt to be of most relevance is presented at the start of each section.

3.1 General literature

UNDP. (2013). *Issue Brief: Disaster Risk Governance*. Bureau for Crisis Prevention and Recovery, UNDP. http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/issue_brief_disaster_risk_reduction_governance_11012013.pdf

This Issue Brief provides a broad overview of disaster risk governance and UNDP's role in addressing it. In particular it notes that poorly managed economic growth, combined with climate variability and change, is driving an overall rise in global disaster risk for all countries. It also notes that development and disaster risk are interlinked. Rapid economic and urban development can lead to growing concentrations of people in areas that are prone to natural hazards, but these people do not always have the capacity to respond to natural hazards. The Issue Brief outlines the UNDP framework, which is designed to provide practical guidance to mainstream disaster risk reduction and climate change adaptation into development. The framework identifies the following entry points for mainstreaming:

- **Policy development** – integrating disaster risk reduction into development policies at national and sector level, such as agriculture or education policies.
- **Organisational/institutional development** – identifying disaster risk reduction focal points across government agencies and strengthening cross-sectoral coordination mechanisms such as national platforms for disaster risk reduction.
- **Improving advocacy and knowledge** for disaster risk reduction – technical guidelines, training and educational programmes.
- Supporting the **implementation** of specific disaster risk reduction measures – conducting risk assessments and integrating risk reduction into recovery interventions.
- Supporting **broad participation** in disaster risk reduction – community based disaster reduction plans and programmes, as well as increasing the involvement of women in risk reduction plans.

UNDP. (2010). *Disaster Risk Reduction, Governance & Mainstreaming*. Bureau for Crisis Prevention and Recovery – UNDP (BCPR-UNDP). http://www.preventionweb.net/files/17429_4disasterriskreductiongovernance1.pdf

This brief describes the links between disaster risk reduction, governance, mainstreaming and development on the basis of the Hyogo Framework for Action 2005-2015 and the 2009 Global Assessment Report on Disaster Risk Reduction (DRR). It presents UNDP's role and support services, illustrated with some examples from different disaster-prone countries, including two good practices in Indonesia and India. In Indonesia, the brief highlights the passing of Disaster Management Law 24/2007, affording Indonesian citizens individual rights to protection from and during disasters. In India, the brief highlights the process of integrating DRR considerations into Indian school curriculae which began in 2003. The brief comments that DRR governance and mainstreaming interventions have become an integral part of the majority of UNDP DRR programmes and projects. Examples of activities implemented by UNDP include:

- Supporting DRR policy, legal and regulatory framework development and reform.
- Integrating decentralized DRR into local-level development.
- Conducting DRR analysis.
- DRR advocacy, awareness and education.
- Establishing DRR partnerships and networks.

UNISDR. (2011). Reforming risk governance. Chapter 7 in *Global Assessment Report on Disaster Risk Reduction*. Geneva, Switzerland: United Nations International Strategy for Disaster Reduction (UNISDR).

http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/GAR-2011/GAR2011_Report_Chapter7.pdf

This chapter examines opportunities to reduce disaster risk by adapting development instruments, such as national public investment planning systems, social protection mechanisms, and national and local infrastructure investments. The chapter notes that in most countries, however, existing risk governance arrangements are inappropriate, and reforming them is fundamental to reducing disaster risk. In central government, this means anchoring overall responsibility for disaster risk management in a ministry or office with adequate political authority to ensure policy coherence across development sectors. Incremental decentralisation accompanied by clear mandates, budgets and systems of subsidiarity promotes ownership and improved risk governance capacities at all levels. Scaling up community initiatives can be enabled by local planning, financing and investment that build on civil society partnerships. Improved accountability mechanisms enshrined in legislation and work processes, social audit processes, and a free press and active media, all contribute to improving the awareness of rights and obligations on all sides.

Walker, G., Tweed, F., & Whittle, R. (2013). A framework for profiling the characteristics of risk governance in natural hazard contexts. *Natural Hazards and Earth System Sciences Discussions* 1, 2207–2229. <http://www.nat-hazards-earth-syst-sci-discuss.net/1/2207/2013/nhessd-1-2207-2013-print.pdf>

In this paper, the authors propose a framework for profiling risk governance in relation to key characteristics identified in both the general governance literature and in more specific work on risk governance. This framework can be flexibly applied in relation to a specific hazard and national/regional context and enables qualitative profiling across a spectrum of eight governance characteristics.

Tierney, K. (2012). Disaster Governance: Social, Political, and Economic Dimensions. *Annual Review of Environment and Resources*, 37, 341-363. <http://dx.doi.org/10.1146/annurev-environ-020911-095618>

This paper argues that disaster governance is an emerging concept in the disaster research literature that is closely related to risk governance and environmental governance. Disaster governance arrangements and challenges are shaped by forces such as globalisation, world-system dynamics, social inequality, and socio-demographic trends. Governance regimes are polycentric and multi-scale, show variation across the hazards cycle, and tend to be formulated in response to particular large-scale disaster events and to lack integration. Disaster governance is nested within and influenced by overarching societal governance systems. Although governance failures can occur in societies with stable governance systems, poorly governed societies and weak states are almost certain to exhibit deficiencies in disaster governance. State-civil society relationships, economic organisation, and societal transitions have implications for disaster governance. Various measures can be employed to assess disaster governance; more research is needed in this nascent field of study on factors that contribute to effective governance and on other topics, such as the extent to which governance approaches contribute to long-term sustainability.

UNISDR Africa. (2004). Disaster Risk Reduction, Governance and Development. *UNISDR Africa Educational Series 2(4)*. Geneva, Switzerland: United Nations International Strategy for Disaster Reduction (UNISDR).

http://www.unisdr.org/files/8546_governacedevelopment1.pdf

This booklet seeks to raise awareness among decision-makers and community leaders in Africa on the importance of good governance in disaster risk reduction. It focuses on the mainstreaming of disaster risk reduction into development planning and development programmes. It is a tool to highlight the importance and benefits of good policies and strategies and appropriate institutional and legislative systems at national level as frameworks for the design of effective disaster risk reduction plans and programmes. It emphasises the importance of community involvement in disaster risk management planning and activities and the need for decentralised government structures to facilitate broad-based participation. It highlights the need for partnerships between governments, the private sector and civil society, and between national governments and regional and international institutions.

UNDP & IRP. (2010). *Guidance note on recovery: governance*. United Nations Development Programme – Headquarters (UNDP) and International Recovery Platform (IRP).

http://www.unisdr.org/files/16774_16774guidancenoteonrecoverygovernan.pdf

Though primarily focused on governance in disaster recovery this document does provide some relevant lessons in relation to disaster risk governance. The report intends to present a collection of the successes and failures of past experiences in disaster recovery that will serve to inform the planning and implementation of future recovery initiatives. The publication draws from documented experiences of past and present recovery efforts, collected through a desk review and consultations with relevant experts. The document provides analysis of many of the cases, highlighting key lessons and noting points of caution and clarification. It is primarily intended for use by policy-makers, planners, and implementers or local, regional and national government bodies interested or engaged in facilitating a more responsive, sustainable, and risk-reducing recovery process.

Walker, G., Whittle, R., Medd, W., & Watson, N. (2011). *Risk governance and natural hazards*. CapHaz-Net Consortium. http://caphaz-net.org/outcomes-results/CapHaz-Net_WP2_Risk-Governance2.pdf

This report examines risk governance and how this might be understood in the context of natural hazards. Though the report is focused on natural hazards in the European Union this paper provides wider insights into real world practices of governance and some of the challenges, dilemmas, critiques and better and worse practices in relation to risk governance of natural hazards. The paper aims to stimulate thinking about how governance and risk governance issues relate to other issues of capacity building, vulnerability, perception, communication and education.

Castellano, G. (2011). *Rising from the ashes: a governance perspective on emerging systemic risks*. In Alemanno, A. (ed.) *Governing disasters: the challenges of emergency risk regulation* (pp. 246-262). Cheltenham, UK: Edward Elgar Publishing. http://www.e-elgar.com/bookentry_main.lasso?id=14529

Unpredictable events may suddenly cause large-scale losses. The knock-on effect of unpredictable events grows beyond the direct social and economic impact on a specific geographic area, affecting

simultaneously different regions and imposing immediate regulatory answers. This chapter addresses those risks here defined as ‘emerging’, since they lack previous records but are expected to increase in frequency and impact. This chapter attempts to identify the core policy issues to be addressed through a risk-based governance model that stimulates preventive strategies and minimises losses.

Rao, S. (2013). *Regional and national capacity to cope with humanitarian risk*. GSDRC Helpdesk Research Report 896. Birmingham, UK: Governance and Social Development Resource Centre, University of Birmingham.

<http://www.gsdrc.org/go/display&type=Helpdesk&id=896>

This report looks to identify ways to define the regional and national capacity to cope with humanitarian risk. This is humanitarian risk relating to both natural hazards (e.g. adverse conditions, emergencies or disasters) and human-induced hazards (e.g. conflict). In the frameworks identified, the importance of governance, institutions, planning capacity and information management capacity have been frequently identified as key elements, especially in regional (international) frameworks.

3.2 National governance

Neeling, M. (2013). *Post 2015 Framework for DRR Consultation with Parliamentarians*. Session Report. Global Platform for Disaster Risk Reduction, 20 May 2013.

[http://www.preventionweb.net/files/globalplatform/entry_outcome~post2015frameworkfordrrconsultationparliamentarians\[1\].pdf](http://www.preventionweb.net/files/globalplatform/entry_outcome~post2015frameworkfordrrconsultationparliamentarians[1].pdf)

This session report documents a consultation of parliamentarians from 26 countries and four regional parliamentary assemblies. The focus of the discussion was on governance for disaster risk reduction and to obtain the commitment of parliamentarians to the Post-2015 Framework on Disaster Risk Reduction. Parliamentarians shared views and experiences. Conclusions from the discussion include the following:

- Education and planning are essential in preventing natural hazards from becoming natural disasters and parliamentarians are well placed to ensure that this ground-level action is taken, and that care is given to all aspects of planning, including education, health, agriculture and zoning.
- Governance for disaster risk reduction and sustainable development are closely interlinked; special attention should be paid to the vulnerable, including those with disabilities, children, and women.
- Parliamentarians have the direct mandate of the people, and must use the tools available to them to raise their understanding of disaster risk reduction and promote governance for disaster risk reduction.

UNISDR. (2010). *Advocacy kit for parliamentarians: disaster risk reduction: an instrument for achieving the Millennium Development Goals*. United Nations International Strategy for Disaster Reduction (UNISDR). http://www.unisdr.org/files/15711_parliamentariankitfinal.pdf

This handbook aims to assist members of parliament to oversee national progress and investments made in disaster risk reduction towards achieving the Millennium Development Goals in their country. It

outlines priorities, steps and interventions needed to reduce or eliminate disaster risks, and gives examples of work already done by many parliaments around the world. It shows how disasters can derail progress made towards the MDGs and development, and why disaster risk reduction is so important to maintaining development gains. It also points out a few key interventions that should be undertaken in reducing disaster risks to accelerate the process of achieving the MDGs, and how parliamentarians can achieve policy and practical changes, at both national and local levels.

UNISDR. (2013). Governance and Accountability. Section 3.2 in III. Synthesis of Consultations to Date. *Synthesis Report: Consultations on a Post-2015 Framework on Disaster Risk Reduction (HFA2)*. United Nations International Strategy for Disaster Reduction (UNISDR).

http://www.preventionweb.net/files/32535_hfasynthesisreportfinal.pdf

This report provides an overview of the issues emerging to date on the consultations and development of a post-2015 framework for disaster risk reduction (HFA2). This section outlines the key conclusions of the consultations as related to governance and accountability. The establishment of clearer accountability lines, roles and responsibilities were identified as key related issues to be addressed in HFA2. Governance in disaster risk reduction was particularly highlighted. Governance is defined as the system of norms, institutions and interactions that determine how decisions are made and enforced. A common call among stakeholders was for more guidance on governance including a clear delineation of the responsibilities between global, regional, national, and local level in disaster risk reduction. The issue of governance across government and among national institutions was repeated as well and reinforced through calls for promoting coordination, collaboration and “joined-up” approaches.

UNISDR AP. (2013). *The Pacific experience in developing policy and legislation on disaster risk reduction and climate change adaptation*. United Nations International Strategy for Disaster Reduction – Regional Office for Asia and Pacific (UNISDR AP).

http://www.unisdr.org/files/34003_34003pacificexperienceonlegislation.pdf

Taking into account the strong basis of learning the Pacific offers in the area of disaster risk reduction and climate change adaptation (CCA), this study explores the drivers and processes to develop joint national action plans on disaster risk management (DRM) and climate change (JNAPs), primary DRM legislation, and sustainable development plans addressing DRR and CCA in Pacific islands countries. Their impact and potential in facilitating effective DRM and CCA is assessed, as well as potential linkages between legislation and policy documents. The three Pacific islands countries included in this study are Cook Islands, Solomon Islands, Tonga and Tuvalu.

Darwanto, H. (2012). *Preliminary examination of existing methodologies for allocating and tracking national government budget for disaster risk reduction (DRR) in Indonesia*. Asian Disaster Preparedness Center (ADPC), Asian Development Bank (ADB) and United Nations International Strategy for Disaster Reduction – Regional Office for Asia and Pacific (UNISDR AP).

http://www.unisdr.org/files/32377_32377indonesiadraftdrinvestmenttra.pdf

This study examines the disaster risk reduction investment trends in national and local governments, non-governmental organisations, and international organisations in Indonesia. The objective of this study is to understand to what extent investments in DRR in Indonesia are contributed by the national income

accounts. This study is divided into five sections: (i) section one explains the hazards to which Indonesia is exposed and the current DRR plan; (ii) section two explains the purpose of the study and the data collection methods used; (iii) section three presents an analysis of DRR budget data by sector; (iv) section four indicates gaps in existing DRR budget plans and points to lessons learned from similar studies; (v) section five proposes recommendations to further improve Indonesia's DRR budget plan.

UNISDR AP. (2010). *Mainstreaming disaster risk management in national sustainable development plans*. United Nations International Strategy for Disaster Reduction – Regional Office for Asia and Pacific (UNISDR AP).

http://www.pacificdisaster.net/pdnadmin/data/original/UNISDR_2010_mainstream_drm_pacific.pdf

This paper analyses the level of progress made in mainstreaming disaster risk reduction and disaster management into national policies, planning processes, plans and decision-making at all levels and across all sectors, and more particularly into National Sustainable Development Plans of Pacific Island Countries.

UNISDR. (2008). *Towards National Resilience: Good practices of National Platforms for Disaster Risk Reduction*. United Nations Secretariat of the International Strategy for Disaster Reduction (UNISDR).

http://www.unisdr.org/files/3292_TowardsNationalResilience.pdf

This publication includes nine National Platform case studies to help support the creation of new National Platforms, and to strengthen existing ones. Governments increasingly recognise the need for comprehensive multi-stakeholder and multi-sectoral national coordinating mechanisms – National Platforms for Disaster Risk Reduction – to reduce, prevent and manage the impact of natural hazards. 45 countries have already launched National Platforms for Disaster Risk Reduction. Several other countries are in a process of establishing them.

3.3 Local governance

Bang, H. N. (2013). *Governance of disaster risk reduction in Cameroon: The need to empower local government*. *Jàmbá: Journal of Disaster Risk Studies* 5(2), 10-pages.

<http://dx.doi.org/10.4102/jamba.v5i2.77>

This paper analyses the governance of disaster risks in Cameroon with particular focus on the challenges local government faces in implementing disaster risk reduction strategies. This paper explores the challenges and opportunities that local government has in the governance of disaster risks. Based on the findings from this research, policy recommendations are suggested on ways to mainstream disaster risk reduction strategies into local governance, and advance understanding and practice in the local governance of disaster risks in the country. Key recommendations are:

- The central government should mainstream disaster risks within the development plans in the country, especially the provision of critical infrastructure such as roads and the telecommunication network in high-risk zones.
- The central government should institute a policy on DRR that would decentralise responsibilities and resources to local governments, and give them autonomy to manage disasters with minimal interference.

- DRR should be institutionalised and included in the development policies and plans of local governments.
- The central government should prioritise contemporary management of risks based on potential risk, frequency and intensity of hazards rather than on political control of the local government area.
- Local governments should take all available measures to plan and regulate development in hazard prone areas, to enforce orders restricting settlements in risky zones, and to enable access to safe housing and well-situated land.
- Financial and material resources for DRR activities should be kept under the control of committees and not individuals, in order to minimise corruption and embezzlement.
- Local governments should ensure that disaster victims, survivors and beneficiaries, and vulnerable populations are incorporated into the disaster management planning and decision-making process that concerns them.
- Local governments should create and extend partnerships with other DRR agencies, and expand avenues for resource mobilisation in order to strengthen their DRR strategies.

Gaston, B. W., Tongwa, A. F., Burnley, C., & Isabella, Z. T. (2012). Local governance in disaster risk reduction in Cameroon. *Jàmhá: Journal of Disaster Risk Studies*, 4(1).

<http://dx.doi.org/10.4102/jamba.v4i1.56>

In Cameroon, the Global Network of Civil Society Organisations for Disaster Risk Reduction acts as the coordinating organisation to evaluate progress in implementation of the Hyogo Framework for Action. The network undertook evaluations of seven regions of the country, where people have suffered losses from disasters during the last three decades, using administration of questionnaires; consultations with local communities; and four case studies. It found that there was significant scope for improvement on individual local governance indicators, and that effective progress depends on:

- level of achievement in the decentralisation process currently under way;
- adoption of a participatory approach to DRR;
- clear distribution of roles in the DRR process;
- adequate allocation of necessary financial and human resources; and
- enhancement of capacity of local communities to prepare for and respond to all types of disasters.

Vasavada, T. (2013). Managing Disaster Networks in India. *Public Management Review*, 15(3), 363-382.

<http://dx.doi.org/10.1080/14719037.2013.769854>

This article studies a disaster management network in the state of Gujarat, India. Through social network analysis and interviews, the article examines the governance structure of a disaster management network and identifies factors that affect its effectiveness. Four factors – trust, number of participants in the network, goal consensus and the need for network-level competencies based on the nature of the task – were examined. The article concludes that network members can learn how the dynamics of the network relationships can be managed by focusing on trust and goal consensus as factors necessary for effective recovery efforts. It is also important to identify and respond to both the external and the internal demands of the network to effectively manage networks.

Wilkinson, E. (2011). *Decentralised disaster management: Local governance, institutional learning and reducing risk from hurricanes in the Yucatán Peninsula, Mexico*. PhD Dissertation. London: UCL.

A comparative case study method is used to explore differences in municipal disaster management. Five coastal municipalities with medium to high levels of marginalisation were selected from the neighbouring states of Quintana Roo and Yucatán, and semi-structured interviews carried out with stakeholders from government, civil society and affected communities. The findings indicate that decentralisation is important for disaster risk reduction (DRR), but it does not guarantee greater efficiency, social participation or accountability. This thesis highlights the range of activities undertaken to reduce the risk from hurricanes, not all of which are 'managed' by government. In the absence of official support, households and communities develop their own strategies. Local governance reforms and the presence of committed political actors create more conducive conditions for municipal authorities to learn from experience and improve DRR, while community participation raises expectations, improves trust between government and citizens and helps ensure that these lessons are institutionalised.

UNISDR. (2013). *Making cities resilient: summary for policymakers: a global snapshot of how local governments reduce risk*. United Nations Office for Disaster Risk Reduction (UNISDR).

http://www.unisdr.org/files/33059_33059finalprinterversionexecutivesu.pdf

The policy brief informs local policy-makers about the current trends and activities taking place in selected cities that have signed up to the Making Cities Resilient Campaign since 2010. The summary draws largely on the findings of the Making Cities Resilient Report 2012, as well as interviews and information local governments have self-reported to the UN Office for Disaster Risk Reduction (UNISDR). The brief highlights key factors for making cities resilient:

- Put in place **organisation and coordination** to understand and reduce disaster risk, based on participation of citizen groups and civil society. Build local alliances. Ensure that all departments understand their role in disaster risk reduction and preparedness.
- Assign a **budget** for disaster risk reduction and provide incentives for homeowners, low income families, communities, businesses and the public sector to invest in reducing the risks they face.
- Maintain **up to date data** on hazards and vulnerabilities. Prepare risk assessments and use these as the basis for urban development plans and decisions, ensuring that this information and the plans for the city's resilience are readily **available to the public** and fully discussed with them.
- Invest in and maintain **critical infrastructure** that reduces risk, such as flood drainage, adjusted where needed to cope with climate change.
- Assess the **safety of all schools and health facilities** and upgrade these as necessary.
- Apply and enforce realistic, risk compliant **building regulations and land use planning** principles. Identify safe land for low income citizens and upgrade informal settlements, wherever feasible.
- Ensure that **education programmes and training** on disaster risk reduction are in place in schools and local communities.
- **Protect ecosystems and natural buffers** to mitigate floods, storm surges and other hazards to which the city may be vulnerable. Adapt to climate change by building on good risk reduction practices.
- Install **early warning systems** and **emergency management capacities** in the city and hold regular public preparedness drills.
- After any disaster, ensure that the **needs of the affected population** are placed at the centre of reconstruction, with support for them and their community organisations to design and help implement responses, including rebuilding homes and livelihoods.

Guarnacci, U. (2012). Governance for sustainable reconstruction after disasters: Lessons from Nias, Indonesia. *Environmental Development*, 2, 73-85. <http://dx.doi.org/10.1016/j.envdev.2012.03.010>

This paper focuses on Nias, an Indonesian island hit by the December 2004 tsunami and the March 2005 earthquake, and shows why and to what extent governance is key to achieving sustainable reconstruction. In analysing these issues, the article uses evidence from field research and relies on primary data collected through questionnaires, semi-structured elite interviews and in-depth interviews. The paper argues that addressing sustainability during post-disaster reconstruction is a complex task since it involves interconnectedness of different issues and scales, as well as long-term effects of present actions. The paper draws the following conclusions regarding governance gaps:

- Increasing accountability, coordination and legitimacy is fundamental.
- Effective evaluation is a relevant governance aspect necessary to guide reconstruction towards sustainable paths.
- Community engagement and knowledge sharing are two other important governance concerns that emphasize the need to use multiple sources of knowledge to build an integrated and holistic understanding of the local context.

UNISDR. (2010). Local governments and disaster risk reduction: good practices and lessons learned. United Nations International Strategy for Disaster Reduction (UNISDR). http://www.unisdr.org/files/13627_LocalGovernmentsandDisasterRiskRedu.pdf

This collection of good practices shows how building the capacity of local institutions is key to sustaining disaster risk reduction, and demonstrates the immediate impact of local and national political commitments that institutionalise disaster risk reduction. It also showcases collaboration between local and national governments, civil society organisations and international agencies.

Bollin, C., Cárdenas, C., Hahn, H., & Vatsa, K. S. (2003). *Disaster risk management by communities and local governments*. Inter-American Development Bank. <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=1441955>

This study seeks to strengthen and integrate local actors as essential elements within their respective national systems, so that they can contribute as much as possible to the reduction of the risks and disasters in their own territories. Local actors depend on the existence of appropriate national political, legal, and institutional frameworks, in a decentralised context, in order to be as efficient as possible in their efforts to reduce risks in their jurisdiction. This analysis considers the national context in its relationships to the local context, within an environment of decentralised functions and authority. This report:

- examines (and confirms) the hypothesis that a **decentralised system** in which local actors play an important role is the most effective way of reducing disasters in Latin America and the Caribbean;
- describes the **mechanisms that strengthen the capacities** of relevant local actors, with the objective of proposing guidelines for the formulation of a technical assistance strategy to build local capacity to comprehensively manage risks;

- examines **financial and fiscal decisions for risk management** at the local level, taking into account that the local governments are very diverse in their jurisdictions, capacities, and resources; and
- develops **indicators** so as to improve the capacity of the communities and local governments to gauge the key elements of disaster risk.

Satterthwaite, D. (2008). *Climate Change and Urbanization: Effects and Implications for Urban Governance*. Paper prepared for the United Nations Expert Group Meeting on Population Distribution, Urbanization, Internal Migration and Development, 21-23 January 2008, New York, United Nations Department of Economic and Social Affairs (UNDESA).

http://www.un.org/esa/population/meetings/EGM_PopDist/P16_Satterthwaite.pdf

Among urban centres in low- and middle-income nations, the most obvious increased climate change risk comes from the likely increase in the number and intensity of extreme weather events such as heavy rainstorms, cyclones or hurricanes. How can municipal governments in low- and middle-income nations prepare for and adapt to these risks? This paper indicates that most adaptation to these dangers over the next few decades fits well within a local development agenda. There needs to be a significant increase in development funding to help local governments adapt to climate change challenges. Development and adaptation funding programmes should include:

- **Building local capacity** to produce sound adaptation programmes and to help municipalities become more responsive to population groups most at-risk of climate change disasters.
- Providing **development assistance to central government**, which often opposes increased powers and responsibilities at the local level.
- Management of the inevitable difficulties of funding to cities controlled by the political opposition.
- **Long-term development commitment** to ensure the creation of practical and useful adaptation programmes.

Albrito, P. (2008). *For a new governance of natural risks: Building a local government alliance for disaster risk reduction*. United Nations Office for Disaster Risk Reduction (UNISDR).

http://www.unisdr.org/files/8629_ISDRGovernanceen1.pdf

This presentation examines the problems of risk management and the role of local and regional authorities in this field. It advocates for the public authorities and populations in areas at risk to reinforce their capacity to anticipate and respond to natural disasters.

Arenas, A. (2005). *Local Governance for Disaster Risk Reduction*. Presentation. UNDP-BCPR.

<http://www.unisdr.org/2005/wcdr/thematic-sessions/presentations/session1-9/undp-bcpr-mr-arenas.pdf>

This presentation looks to provide an overview of what (good) governance means for the local level; why local good governance is important for effective and sustainable disaster risk management; what the consequences are for the local actors in terms of responsibilities and opportunities; and what the main factors are that impede effective disaster risk management in the context of local good governance.

3.4 Institutional arrangements

Wilkinson, E. (2012). *Transforming Disaster Risk Management: A Political Economy Approach*. ODI Background Note Series. London: ODI.

<http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7555.pdf>

This paper examines recent work by disaster researchers on the complex role of institutional arrangements in shaping policy decisions. It identifies incentive structures, information gaps and intra-governmental relations as key factors affecting the decisions of national and local authorities. It recommends more interdisciplinary research on political processes and policy change to develop a clearer theoretical focus for Disaster Risk Management, so as to help promote the necessary institutional transformation.

IFRC. (2013). *Better laws, safer communities? Emerging themes on how legislation can support disaster risk reduction*. Geneva: International Federation of Red Cross and Red Crescent Societies (IFRC).

http://www.ifrc.org/PageFiles/118981/IFRC_better-laws-safer-communities_2013.pdf

The IFRC and the UNDP are currently engaged in a global DRR research project which seeks to identify best practice in legislation for DRR and its implementation, as well as common gaps or issues that need additional focus. It will draw on desk studies of the laws of 26 countries and more comprehensive analyses of both laws and their implementation in 15 countries from all regions of the globe. A synthesis report setting out the detailed findings is scheduled for release in October 2013. This pamphlet sets out some of the preliminary findings that the IFRC is noticing from the joint research. These are:

- While there have been many new laws and policies adopted, thus far, the resulting **legal reforms seem to be less comprehensive** than is generally assumed.
- The development of **new legislation on disaster risk management can be a key enabler** for DRR awareness through the public process of law-making, as well as by providing the content for clear institutional mandates and implementation of DRR.
- **Safety legislation in sectors outside disaster management laws holds the key to long-term reduction** of underlying risks (as identified in “Priority Four” of the HFA), but their implementation needs more support. To establish an integrated approach to DRR, these sectoral laws also need to include DRR criteria, and to be coordinated with disaster risk management systems.
- **Partnerships between local government and communities** are needed for effective implementation of DRR safety regimes at local level. Challenges in implementation of safety regulations at the local level, such as land use planning and building codes, emerges as the most common barrier to effectiveness.

The IFRC have produced a number of country case studies on international disaster response law (IDRL). These case studies highlight some of the main legal gaps, unused potential under existing laws, and good disaster risk reduction risk (DRR) practices that have evolved under or in response to the DRR legal framework. Some recent (i.e. 2013) case studies are:

- **Nicaragua (Spanish only):** http://www.ifrc.org/PageFiles/118948/Nicaragua_2013_IFRC_Law-DRR-Case-Study.pdf

- **Ethiopia:** http://www.ifrc.org/PageFiles/118937/Ethiopia_DRR-Case-Study_2013I.pdf
- **Peru (Spanish only):** <http://www.ifrc.org/PageFiles/109842/PERU%20-%202027%20FEB.pdf>
- **Argentina (Spanish only):** http://www.ifrc.org/PageFiles/109622/ARGENTINA_IDRL.pdf
- **Kazakhstan:** http://www.ifrc.org/PageFiles/109622/ARGENTINA_IDRL.pdf

Further reports are available here: <http://www.ifrc.org/en/what-we-do/idrl/research-tools-and-publications/disaster-law-publications/>

Hay, J. (2012). *Disaster risk reduction and climate change adaptation in the Pacific: an institutional and policy analysis*. United Nations Development Programme – Headquarters (UNDP) and United Nations Office for Disaster Risk Reduction (UNISDR).

http://www.unisdr.org/files/26725_26725drrandccainthepacificaninstitu.pdf

This study provides an analysis of the current level of integration of disaster risk reduction (DRR) and climate change adaptation (CCA) in the region, with an emphasis on the institutional and policy environment. The analysis presented includes seven Pacific island countries (Cook Islands, Federated States of Micronesia, Fiji, Palau, Samoa, Tonga, and Vanuatu). The study shows that despite the fact that there is typically a low level of integration at the operational level, countries are making efforts to develop Joint National Action Plans (JNAPs) for DRM and CCA, as well as move towards integrating their institutional platforms for DRR and CCA. The report also outlines some of the challenges and barriers to integration, evolving good practice towards integration, and provides recommendations for regional and national stakeholders for further action. This report explores how and why the fields of DRR and CCA have developed in parallel globally as well as in the Pacific, rather than being more integrated. In particular the report notes the increasing recognition that, especially at the community level, there is little practical difference between DRR and CCA.

Lassa, J. A. (2011). *Institutional Vulnerability and Governance of Disaster Risk Reduction: Macro, Meso and Micro Scale Assessment (With Case Studies from Indonesia)*. PhD Dissertation. Bonn: University of Bonn. <http://hss.ulb.uni-bonn.de/2011/2451/2451.pdf>

This PhD research examines how the quality of institutions and governance influence the level of disaster risk and disaster reduction policy. The findings outline qualitative and quantitative methods at different scales of governance that can assess institutional vulnerability and the governance of disaster risk reduction. At a global level, a quantitative approach to measuring institutional quality and governance disaster risk reduction is possible using global data on countries' implementation of the Hyogo Framework for Action; however, more efforts are required in the future. At the meso- and micro-levels, this work describes the history of institutions for disaster risk management in Indonesia from the colonial period until the present challenges of decentralised governance. The main message is as follows: without considering institutions, institutional quality, and specific governance of disaster reduction at macro-, meso- and micro-scales, disaster risk reduction will not be sustainably implemented.

APN. (2005). *Institutional capacity in natural disaster risk reduction: A comparative analysis of institutions, national policies, and cooperative responses to floods in Asia*. Asia-Pacific Network for Global Change Research (APN).

<http://www.apn-gcr.org/resources/archive/files/a4adb6376d59bf80f80999396843c8d8.pdf>

This study examines how to effectively shape human institutional responses to the risks of natural disasters with a special focus on floods. Although a variety of domestic and regional institutions, including legislation, administration, policies and strategies are in place and risk reduction measures are undertaken, the vulnerability of people to floods remains high both in developed and in developing countries; the poor are especially vulnerable. This study includes analysis of developed, transition economies and developing countries. Lessons learned about how institutions can help to address human vulnerabilities to floods include: the failure to integrate flood disasters into normal development planning in flood-prone regions and the failure to recognise the importance of learning for building social and ecological resilience and for guiding individual and collective behaviour. Recommendations for future action on strengthening institutional capacities include building an interdisciplinary integrated approach to flood management with the involvement of local authorities and representatives of civil society.

Lebel, L., Manuta, J. B., & Garden, P. (2011). *Institutional traps and vulnerability to changes in climate and flood regimes in Thailand*. *Regional Environmental Change*, 11(1), 45-58.

<http://www.springerlink.com/content/n40234346vt15273/>

Vulnerabilities to floods in Thailand are changing as a result of many factors. Formal and informal institutions help shape exposure, sensitivity and capacities to respond of individuals, social groups and social-ecological systems. In this paper the authors draw on several case studies of flood events and flood-affected communities to assess how current practices reflect various laws, procedures, programmes and policies for managing floods and disasters and then explore the implications for dealing with additional challenges posed by climate change. The analysis identifies several institutional traps which need to be overcome if vulnerability is to be reduced, namely capture of agendas by technical elites, single-level or centralised concentration of capacities, organisational fragmentation and overemphasis on reactive crisis management. Possible responses are to expand public participation in managing risks, build adaptive capacities at multiple levels and link them, integrate flood disaster management and climate change adaptation into development planning, prioritise risk reduction for socially vulnerable groups and strengthen links between knowledge and practice. Responses like these could help reduce vulnerabilities under current climate and flood regimes, while also improving capacities to handle the future.

UNDP. (2012). *A Global Review: UNDP Support to Institutional and Legislative Systems for Disaster Risk Management*. UNISDR secretariat and UNDP/BCPR.

http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/asia_pacific/Institutional%20&%20Legislative%20Support%20for%20DRM%20-%20UNDP.PDF

This report highlights governance as a key unresolved issue in both the configuration and the reduction of disaster risk and the need to further strengthen institutional and legislative systems for disaster risk management. With the aim to review its role in strengthening institutional and legal systems, and to direct future UNDP commitment in this area, this global review examines factors contributing to and influencing such systems. The report outlines a number of lessons learned including the following:

- The eventual creation of strong and resilient national Institutional and Legislative Systems for DRM requires sustained engagement of governments, agencies and donors.
- The development of institutions and systems does not follow a linear path and there are no recipes or blueprints for their creation.
- The establishment of a national institutional and legislative system for DRM is not a narrowly “technical” task but requires the creation of political interest and careful facilitation of a process whereby multiple actors get involved and committed to the objectives of DRM.
- Political commitment can be generated but is typically short-lived and requires “maintenance” on the part of national and international proponents of DRM.
- DRM is the result of the engagement, actions and cooperation of many actors operating at different administrative levels and in various sectors.
- Long-term engagement at intermediate (i.e. provincial or departmental) and local (municipal in particular) levels sometimes produces tangible results that have proven to be more resilient to political fluctuations than investments at the national level.

UNDP. (2007). *Institutional and Legislative Systems for Early Warning and Disaster Risk Reduction*. United Nations Development Programme (UNDP).

The Regional Programme on Capacity Building for Sustainable Recovery and Risk Reduction was initiated by the United Nations Development Programme Bureau for Crisis Prevention and Recovery in November 2005. The programme's mission was to build the resilience of communities and nations to natural disasters through increasing the capacities of countries affected by the Indian Ocean Tsunami in post disaster recovery and disaster risk reduction. During the course of the implementation of activities by the Regional Programme, a number of knowledge products have been developed including 'Institutional and Legislative Systems for Early Warning and Disaster Risk Reduction' studies for Indonesia, Sri Lanka and Thailand. These three studies commissioned by UNDP in 2007 capture:

- the status of the institutional, policy and legal framework for early warning systems (EWS) and risk reduction;
- the main gaps remaining to establish a comprehensive EWS within a holistic risk reduction policy; and
- recommendations for stakeholders (particularly UNDP and governments) on the immediate strengthening of EWS through the policy, legal or institutional framework.

Each report is accompanied by a brochure that gives a summary of the country studies.

- **Indonesia:**
 - **Summary:** <http://www.snap-undp.org/elibrary/Publications/EWSSummaryIndonesia.pdf>
 - **Report:** <http://www.snap-undp.org/elibrary/Publications/EWSReportIndonesia.pdf>
- **Sri Lanka:**
 - **Summary:** <http://www.snap-undp.org/elibrary/Publications/EWSSummarySriLanka.pdf>
 - **Report:** <http://www.snap-undp.org/elibrary/Publications/EWSReportSriLanka.pdf>
- **Thailand:**

- Summary: <http://www.snap-undp.org/elibrary/Publications/EWSSummaryThailand.pdf>
- Report: <http://www.snap-undp.org/elibrary/Publications/EWSReportThailand.pdf>

Eakin, H., Eriksen, S., Eikeland, P. O., & Øyen, C. (2011). Public sector reform and governance for adaptation: implications of new public management for adaptive capacity in Mexico and Norway. *Environmental management*, 47(3), 338-351. <http://link.springer.com/article/10.1007/s00267-010-9605-0>

Using evidence from a case study of reforms in the building sector in Norway, and a case study of water and flood risk management in central Mexico, the authors analyse the implications of the adoption of the tenets of “New Public Management” (NPM) for adaptive capacity. The case studies illustrate that some of the key attributes associated with governance for adaptation—namely, technical and financial capacities; institutional memory, learning and knowledge; and participation and accountability—have been eroded by NPM reforms. Despite improvements in specific operational tasks of the public sector in each case, this study shows that the success of NPM reforms presumes the existence of core elements of governance that have often been found lacking, including solid institutional frameworks and accountability. The analysis illustrates the importance of considering both longer-term adaptive capacities and short-term efficiency goals in public sector administration reform.

Raschky, P. A. (2008). Institutions and the losses from natural disasters. *Natural Hazards and Earth System Science*, 8(4), 627-634. <http://www.nat-hazards-earth-syst-sci.net/8/627/2008/nhess-8-627-2008.pdf>

The purpose of this paper is to highlight the effects of the institutional framework that influences human behaviour by setting incentives and to point out the importance of institutional vulnerability. This paper finds that the institutional framework is a key socio-economic determinant of a nation’s vulnerability against natural disasters. Governmental stability and a lower risk of expropriation have a significant impact on both, the death toll and the overall economic losses from natural disasters. Institutions reduce the adverse effects of natural disasters but the paper also finds that economic development is an important factor in determining a society’s vulnerability against natural hazards. Economic development is related to increased protection against natural hazards, but with a diminishing rate. In areas with a concentration of assets that is larger than the installation of appropriate counter measures, higher income can result in greater, rather than less, vulnerability.

4. Additional references

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UNDP. (2013). *Issue Brief: Disaster Risk Governance*. Bureau for Crisis Prevention and Recovery, UNDP. Retrieved from:

http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/Issue_brief_disaster_risk_reduction_governance_11012013.pdf

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<http://www.gsdr.org/go/display&type=Helpdesk&id=991>

About this report

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