Chapter 1
The Millennium Development Goals (MDGs) have successfully raised popular and political support for poverty reduction. For over a decade, they have represented a tool for measuring development progress, elaborated through a set of targets and indicators. Nevertheless, the world has changed considerably since efforts began to develop the MDGs, and while many traditional MDG issues remain unresolved, there are key challenges and issues that warrant inclusion in a new framework when the current MDG commitment period expires in 2015.

One such issue is the increasing propensity for disasters and the failure of existing development frameworks and policies to reduce the impact of disasters on society and the economy (see Wilkinson et al., 2012). Globally, exposure to disasters is rising as more people and assets are located in hazard-prone locations. Furthermore, disaster risk is expected to further increase in coming decades as vulnerability, exposure and the frequency and severity of many hazards are influenced by a range of factors, including population growth, urbanisation and climate change (Foresight, 2012; IPCC, 2012). Disasters can hamper the achievement of development goals; can reverse development gains; and often have their harshest impact on poor people (IPCC, 2012; UNISDR, 2009a). Conversely, without adequate focus on protecting people and assets from disasters, development processes can also serve to increase disaster risk (Wisner et al., 2003). For these reasons, disaster risk management (DRM) should be a core feature of the post-2015 development agenda and the goals, targets and indicators that emerge (Mitchell et al., 2012).

While the need to tackle disasters was a feature of the original Millennium Declaration, it did not translate into a disasters goal, target or indicator in the MDGs. Since then, governments have signed the Hyogo Framework for Action (HFA), the global agreement to build disaster resilience (2005-2015), which has served to establish DRM as a core development issue. The inclusion of DRM as a key feature of the Rio+20 text, on the G-20 agenda and as a central feature of an IPCC Special Report, all in 2012, demonstrates the emphasis being placed on reducing disaster risk internationally in the face of growing disaster losses, and serves to highlight the broad appeal of the issue across policy arenas.

In the context of the post-MDG discussion, ‘disasters’ have been featured in the UN thematic consultations, most recently serving as the subject of a meeting in Jakarta (February 2013) hosted by the president of Indonesia, and have been the topic of several technical studies and policy notes relating to 2015 goals (e.g. Mitchell, 2012; Mitchell et al., 2012; UNDP, 2013; UNISDR/WMO–UN Task Team, 2012). A number of proposals and documents on the architecture of the overall post-2015 goals framework have included DRM as a central feature – notably by the Centre for International Governance Innovation (CIGI)/Bellagio Group, the UN ‘Realizing the Future We Want for All’ Report and Save the Children, among others (see www.post2015.org for a database of proposals). The communique from the meeting of the UN Secretary General’s High Level Panel on the Post-2015 Development Agenda in Bali (March 2013), also included ‘disaster preparedness’ as a prominent consideration. Furthermore, as the Sustainable Development Goals (SDGs) ‘Open Working Group’ begins its work, the focus on disaster risk reduction (DRR) in the Rio+20 outcome document, ‘The Future We Want’, will be a critical foundation for further discussions. This calls for countries to:

- Accelerate implementation of the HFA, at all levels, and build resilience to disasters with a renewed sense of urgency;
- Commit adequate, timely and predictable resources to DRR, including for the international community to help with technical assistance and technology transfer;
- Ensure early warning systems (EWS) and disaster risk assessments are a key part of disaster resilience efforts at all levels; and
- Ensure investments and development plans integrate a comprehensive approach to reducing risk and enable smooth transitions between relief, recovery and development, including by linking with climate change adaptation (CCA) and promoting gender-based approaches.

Accordingly, while organisations, reports and inter-governmental processes have made the case for including DRM in post-2015 goals, few have embarked on serious attempts to assess which targets and indicators might be most suitable. This report seeks to address this, by analysing...
potential post-2015 DRM targets and indicators associated with mortality, economics, poverty and health, and ways DRM could be included in other goals relating to education and poverty reduction. This reflects the way DRM should be considered across key development sectors and highlighted as a development priority that can be achieved by having its own goal or target. Participants of the Jakarta consultation endorsed such an approach (see UNDP, 2013).

1.1 Formulating targets and indicators for DRM

Recent work on ways to include DRM in post-2015 goals has highlighted criteria and priorities for selecting the most appropriate targets and indicators. For example, Mitchell (2012) highlights that good targets and indicators should match the interest of the target audience, be easy to interpret, incentivise the right kind of action, be representative of the issue being considered, show

Box 1: An eight-point checklist for developing targets and indicators on DRM

A target and indicator set on DRM should:
- Be motivating – ambitious but achievable;
- Be amenable to aggregation globally but also suitable for translating to national, sub-national and community levels;
- Include outcome-oriented components;
- Include risk reduction components;
- Add value rather than focusing on aspects that are already improving;
- Be simply and straightforward to communicate;
- Be measurable, though not necessarily already measured globally, with the potential for a baseline to be created; and
- Be able to capture trends in both extensive and intensive disaster risk.

Table 1: Key tests for assessing the most suitable goals, targets and indicators

<table>
<thead>
<tr>
<th>Options for goals</th>
<th>Options for targets</th>
<th>Options for Indicators</th>
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<tbody>
<tr>
<td>Is it understood the same way by all stakeholders?</td>
<td>Is it a priority for poor people?</td>
<td>Can progress be measured every year?</td>
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<tr>
<td>Can it be communicated clearly?</td>
<td>Would concerted action on the target actually make a positive difference?</td>
<td>Do reliable, comparable, disaggregated data already exist or can they be developed?</td>
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<tr>
<td>Is it politically acceptable for key constituencies?</td>
<td>Is there a good basis on which to calibrate the target (ambitious but achievable)?</td>
<td>Is measurement likely to be relatively transparent/corruption free?</td>
</tr>
<tr>
<td>Does it motivate the right actions?</td>
<td>Is the target meaningful at all scales?</td>
<td>Is there capacity to measure progress everywhere or can it be developed easily?</td>
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<td></td>
<td>Does it reinforce human rights?</td>
<td>Does the indicator link to the target?</td>
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<td></td>
<td>Is it simple and easy to understand?</td>
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developments over a relevant time period, have a baseline and be scientifically and statistically sound. Box 1 highlights a further set of priorities for formulating targets and indicators that have been specially tailored to DRM in the context of post-2015 goals (ibid.).

The final priority on extensive and intensive risk is particularly important, as, while intensive risks manifest as major headline-grabbing disasters, evidence suggests that, globally, development progress and household poverty are most heavily affected by small-scale disasters that are often not recorded in international databases or covered by the media (UNISDR, 2009a).

Criteria for assessing the utility of goals, targets and indicators on DRM in the context of post-2015 goals were further elaborated in an expert group workshop hosted by the UK Department for International Development and the Overseas Development Institute (ODI) in December 2012 (see Table 1). This approach has been used to guide the work of the different authors contributing to this report.

1.2 Structure of the report

The report is divided into two clusters. The first cluster examines options for a standalone goal, targets and indicators on DRM. The chapters focus on economics impacts, mortality, vulnerability (through a poverty lens) and health. The second cluster looks at ways in which DRM might be reflected in other goal areas, particularly those focused on poverty reduction and education. The report concludes with a synthesis of key findings.

In Chapter 2, Dr Nicola Ranger and Dr Swenja Surminski of the London School of Economics focus on options for targets and indicators on DRM related to their economic impact. The authors highlight that the extent of economic damage from natural disasters is linked intimately with the level of development, depth of poverty and pace of economic growth. In this context, economic resilience to disasters can be considered as a key enabler of broader development goals. In formulating targets and indicators, the authors assess the potential trade-offs between relevance and measurability. They offer perspectives on the key question of how economic losses or economic resilience associated with disasters can be measured every year, recognising that intensive disaster risks are infrequent by their nature.

In Chapter 3, Debarati Guha-Sapir and Philippe Hoyois of the Centre for Research on the Epidemiology of Disaster assess options for targets and indicators relating to disaster mortality. The authors highlight how disaster deaths vary considerably between disaster types and socioeconomic contexts, but, while data on deaths are often collected in many regions, few countries assess what determines why some people die over others. Further, they discuss how disasters data require standardisation in terms of basic definitions, concepts and collection methods to establish globally comparable datasets. They go on to elaborate potential targets and six indicators on mortality, along with suggestions on how to improve measurement.

Chapter 4, written by Daniel Clarke and Robert Reid of the World Bank, highlights how disasters affect the poorest and most vulnerable disproportionately, especially women, children and the elderly and those affected by conflict and violence. It discusses targets and indicators for reducing disaster-induced poverty, and calls for blending statistical approaches to measuring progress that combine observational data and model-based data to overcome the high variability in disaster impacts each year.

Chapter 5, by the World Health Organization, investigates options for including health in a DRM goal and targets. It demonstrates the importance of taking a broad perspective on disasters – to include technological and conflict-related disasters as well as communicable disease epidemics – in the context of national health systems and multi-sectoral action. The chapter focuses on options for potential indicators, including measurement of health outcomes, strengthening capacities (including for the implementation of the International Health Regulations (2005)) and the creation of safer, more prepared and more resilient health facilities.

In Chapter 6, Dr Andy Sumner, of Kings College London, examines the links between poverty, vulnerability and resilience, and questions whether the existing treatment of poverty in the MDGs adequately reflects a resilience and vulnerability perspective. The chapter looks at how the
geography of poverty and risk may intersect in 2030, and proposes three poverty domains and accompanying indicators that would improve the way resilience to shocks could be factored in any post-2015 framework. The underlying objective is to ensure shocks and stresses of all kinds, whether disaster related or otherwise, do not hamper poverty reduction efforts.

Chapter 7, written by Fe Garcia, Richard Rumsey and Lisa Zook Sorensen from World Vision International, focuses on the link between disasters and education, considering how DRM could be included within indicators associated with an education goal. While the authors acknowledges that identifying indicators and targets that elaborate the full interplay between disasters and education is challenging, they go on to propose some preferred options. The chapter also stresses the importance of having education-related indicators associated with a DRM target and to strengthen the links between the issues by cross-referencing.

Chapter 8 synthesises the findings of each of the chapters, proposes a summary of targets and indicators and discusses next steps, including how to test candidate targets and indicators at country and community level.

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Chapter 1 Endnotes

1 Adapted from Bosch and Gabrielson (2003)