Making better Use of Disaster Risk Information: Lessons for a Post-2015 Framework for Disaster Risk Reduction

UNISDR–Australia Workshop, Canberra Australia, 27-28 June 2013

Outcome Statement

The UN Secretary General's Special Representative for Disaster Risk Reduction, Ms Margareta Wahlström, international experts and senior officials from the Asia-Pacific region met in Canberra 27-28 June to consider how the post-2015 framework for disaster risk reduction (HFA2) might provide guidelines for the better use of risk information for sectoral and territorial development planning and investment decisions.

Global consultations conducted by UNISDR on the Hyogo Framework of Action (HFA) through 2012 highlighted a wide demand for access to reliable and useable risk information. The Canberra workshop reviewed examples of how data, information and knowledge are being used as a basis for sound risk reduction decisions and agreed that the HFA2 could provide practical guidance at all levels, from global to local, on the use of risk information.

Background

So far this century, of the total value of capital investment by the public and private sectors, which averages around USD 10.2 trillion, approximately 2.4% is lost each year due to disasters.

While this is a burden even in high-income countries, in most low-income and many middle-income countries recurrent disasters can drive vulnerable population groups and regions into poverty and greater vulnerability.

Countries have successfully reduced mortality risk, particularly to weather related hazards, thanks to improving development conditions, early warning, disaster preparedness and response. However, efforts under the HFA have not been as effective in factoring disaster risk considerations into public or private investment and wider sustainable development efforts.

Global disaster risk is unevenly distributed both between and within countries. In high-risk countries and localities disaster risk now threatens a substantial proportion of productive assets and investments, and negatively affects social welfare and efforts to end poverty and reduce vulnerability. High-income countries like Japan, where a significant proportion of the world's productive assets are concentrated in a hazard-prone region, have the highest absolute economic risks. In relative terms, however, low-income countries with small economies, such as some Small Island Developing States, risk losing a large proportion of capital stock, investment and output in disasters – exacerbating economic vulnerability, often forcing households into poverty.

Effectively managing disaster risks, therefore, is essential to the competitiveness, sustainability, inclusiveness and resilience of hazard-exposed and vulnerable countries, businesses and communities. This imperative will become stronger with increasing climate variability and the expected onset of dangerous climate change in the forthcoming decades.

Disaster risk management may include a wide variety of strategies encompassing avoiding the creation of new risk; mitigating existing risks; exploring mechanisms to share or transfer risk; and managing residual risk through effective preparation to respond and recover from disasters. Activities may focus on improving risk governance, public education, the protection of critical infrastructure, development planning and

building codes, natural resource management, risk finance and insurance mechanisms, and diversification of livelihoods.

Credible and useable information on risks is essential to inform the design of such strategies, at all levels, from the household and community level, through local governments, sectors and businesses and into national economic planning and management.

While there is evidence that investment in reducing existing risks is increasing, countries report having been challenged to reduce the underlying drivers of risk under HFA Priority Area 4.

A particular challenge for HFA2 therefore will be to transform the character of development in a way that avoids the creation of new disaster risk. This will enable sustainable and inclusive development, as outlined in the Rio+20 outcome document 'The Future We Want', and the prospective post-2015 development agenda. To do so, knowledge of disaster risks is essential to inform investment planning, development strategy and policy decisions in the public, private and community sectors.

HFA2, therefore, should provide guidance as to how improvements in the quality, availability and accessibility of risk information and knowledge can facilitate this paradigm shift. This guidance should take into account the following areas of concern:

Accounting for disaster losses

- Measuring and understanding disaster losses at national, provincial, city and local scales is essential to make the case for an effective management of disaster risks. Communities, businesses and governments alike are unlikely to prioritise the necessary investments in risk reduction and control unless the magnitude of past loss and its relevance for anticipating future loss is made clear and explicit. **Governments, with the participation of all sectors of society, should ensure that all disaster losses are accounted for.**

- A significant proportion of global disaster loss, in particular those faced by low-income households, small businesses and local governments is associated with recurrent small-scale disasters and extensive risk. These losses have pervasive and negative impacts on local economies and social welfare. **It is essential, therefore, that national disaster databases document not only the impact of large, intensive disasters but also the accumulated losses from everyday events.**

- Disaster loss accounting is generally limited to measuring direct losses to assets such as housing and infrastructure. **It should expand to embrace an assessment of indirect losses in employment and production; investment, savings and capital formation; welfare and social impacts. Data should differentiate disaster impacts by gender, social group, economic sector, and other key indicators.**

- Ultimately, the best indicator of a country's continuing success in disaster risk reduction is whether losses and impacts trend up or down. At the same time, disaster loss accounting is also an essential underpinning of risk assessment as the risks associated with recurrent small-scale events can only be measured using historical disaster loss data. **Disaster loss accounting, therefore, should be used to monitor progress in disaster risk reduction and to enrich risk assessments.**

- Currently disaster losses are accounted for using a wide variety of approaches and methodologies at different scales. **Common standards for measuring and**

accounting for disaster loss and impacts should be developed and adopted to improve the credibility and comparability of disaster loss data and information across scales and between different stakeholders and territories.

- Disaster loss data is a public good in the same way as data on health, education, employment and the economy. **Disaster loss data and information should be openly available to all stakeholders including the public.**

Generating risk knowledge

- Risk information and knowledge is not the same as risk data. **The production of risk information, based on available data, should be demand led and tailored to a wide range of disaster risk management applications at different scales and involving different stakeholders, from households, through businesses to local and national governments. It should be owned and acted upon by those at risk, with public agencies responsible for clear and timely communication with stakeholders.**

- Detailed exposure and vulnerability data required to accurately assess risks is rarely available, especially to vulnerable communities and in difficult environments. These datasets are often the most difficult, expensive and dynamic datasets associated with risk assessments. This data has broad application, beyond disaster risk, and should be informed by a consultative process to ensure the data is fit for multiple purposes. **We should encourage investment in low-cost, innovative approaches to collecting and sharing exposure and vulnerability data.**

- Advances in science and technology will progressively facilitate more accurate risk assessments. However, **it is better to enable good risk knowledge and mitigation action on the basis of today's data than wait for perfect risk assessment in the future.**

- The methodologies used for risk assessment should always be appropriate to the needs and applications of users in each locality or sector. For risk information to become risk knowledge it needs to answer the questions users ask in order to effectively manage their risks. **Guidelines and standards for risk information should be flexible and not be prescriptive while helping build consistency, comparability, credibility and inter-operability.**

- Open access risk information produced using open source platforms is essential to underpin dialogues between business, governments and communities on the design of effective disaster risk management strategies. **Approaches for capturing, sharing and using risk data and information should be open and transparent. Collaboration between the public and private sectors, including the insurance industry, on generating and applying open access risk information should be strengthened.**

Translating risk knowledge into effective disaster risk management

- Currently a growing volume of risk information is being produced in different formats and at different scales. Often this risk information is supply-led and not presented to decision-makers in a way that is actionable. **We should focus on risk assessment projects that have a clear client or purpose, and produce demand-led risk information appropriate to the needs of the user. Work should centre on how scientists and technical specialists can best communicate risk, and building the capacity of decision-makers to systematically incorporate risk information into their decisions.**

- There will always be trade-offs between the economic, political and social value represented by many hazard prone locations and the risk that may exist when occupying and using such locations. Successful businesses and societies are not necessarily those that eliminate risks totally, but those which learn to manage or optimize their risks. **Risk information can and should make those trade-offs explicit. While risk knowledge may lead to investments in disaster risk reduction, ultimately it should enable stakeholders to understand their appetite for risk and make informed decisions.**

- **To enable stakeholders to use risk information, the information should clearly highlight who holds responsibility for managing the risk, enabling stakeholders to make informed decisions to share or transfer risks.**

- Disaster risk management should stress *no regret* development activities. This includes, for example, improved water availability and quality, improved social welfare, equality and wealth, business continuity and an improved quality of life in cities. Improved development outcomes build resilience to disasters. This in turn, increases the sustainability of those development gains. **Disaster risk knowledge should therefore be considered in the design of all development programs.**

- Stakeholders rarely face risk from natural hazards in isolation. They are also exposed to other risks associated with technological, biological, economic, social, and other threats. **Effective risk management will be strengthened when stakeholders are able to integrate different strands of risk information. This will provide a more holistic picture of the risks they face and enable choices between risk management strategies and options.**

The role of the private sector

- While public sector investment is essential to provide social and productive infrastructure, the vast majority of investment in most countries is provided through the private and community/household sector. In addition a growing proportion of investment in publicly regulated infrastructure is provided through a range of public-private partnerships. **The private sector should therefore apply risk information to ensure risk-sensitive investment. This is critical to ensure sustainable reductions in, and control of, disaster risk in the future.**

- Small and medium enterprises are more vulnerable to the impacts of natural hazards, due to the lower value of their asset base, and are likely to lack risk awareness or struggle to find the capacity to manage disaster risks. Very small and family-owned businesses in developing countries will have particular needs. **Strategies to encourage risk-sensitive private sector investment should recognise the needs of small businesses, and work with communities to build resilient local economies.**

- Successful economies depend on competitive and inclusive business while business in turn depends on safe and resilient publicly regulated land-use, planning and development controls and lifelines. **Mechanisms should be developed to facilitate increased collaboration between the private sector and local and national governments on the development of disaster risk management strategies. This will generate shared value for all, on the basis of shared risk information and knowledge.**