

Pre-zero draft of the post-2015 framework for disaster risk reduction

Consultation response

The note below is a collective response to the pre-zero draft of the post 2015 framework for disaster risk reduction prepared by the international science community of the Integrated Research on Disaster Risk programme (IRDR). The programme brings together engineering, social, behavioural, and economic sciences working across a range of approaches from ethnographic to predictive modelling, and with global representation. IRDR is co-sponsored by ICSU, ISSC and ISDR. The views presented here are those of the community members and have not included any communication with the co-sponsors. The text below first identifies three primary concerns, these are then articulated in the following text which follows the structure of the zero draft. Throughout we refer to the post-2015 framework for disaster risk reaction as the HFA II (Hyogo Framework for Action II)

Primary Concerns

We have three primary concerns. All are major issues that have not been consistently addressed in the zero draft.

- The text and its goals and priorities for action reflect existing and past DRR agendas and do not reflect the need to adjust disaster risk reduction/management (DRR/M) to a contemporary development and risk context. Current risk requires more forward looking agenda that explicitly builds risk reduction into development, and through this opens space for sustainable and equitable development – the root pathways to enhanced safety for all. We are especially concerned that the contradiction in the report which both calls for bouncing back better (improving development and risk management capacity) and resilience (protecting existing development capacities). Bouncing back better relies on a disaster moment to enhance underlying development capacity, to capture also the pre-disaster space as an opportunity for this we suggest the use of Transformation which is well established in the climate change adaptation (CCA) literature and increasingly in the DRR/M literature. Resilience and Transformation need not be in tension but it is important to include both as policy choices and illustrate how both might be achieved throughout the text.

Whenever resilience is used we suggest including ‘transformation to sustainable and equitable development’. This will flag unambiguously the ambition of moving from resilience alone (risk management to protect existing development) to include scope for transformation (risk management that seeks to enable development to better provide for sustainable and equitable development).

- Science is recognised in the draft text but its capacity is not fully deployed. We support the inclusion of science as a key stakeholder community. However, this misses an opportunity to explicitly include science capacity across the draft as a supporting element in defining, monitoring and enhancing the HFA II. Science is both a product (new knowledge) and a community (university and non-university sectors). Aligning science and science funding to the HFA II is important and bringing science into the HFA process requires integrating science into defining goals and targets not only to provide a front of pine input or end of pipe monitoring role. The HFA I has met only limited success in expanding the science base and interest, especially when compared to the explosion of science research and interest associated with climate science and climate change adaptation. Science is not just another stakeholder, it is the one that carries and develops knowledge, and thus must be recognized and assigned a more substantive role. Science institutions need to be supported first to develop and strengthen integrated research themselves and secondly, to work in partnership with government, private sector, civil society and those at risk to systematically capture experience, advise and support use of integrated research for their policy making.
- Concerted support for administrative capacity to collect local data on vulnerability, hazard, reconstruction outcomes and most importantly on loss. Without considerable and systematic support

by nations and reaching down to local government progress will be constrained. Monitoring capacity will need to be enhanced to support the likely indicators of the SDGs and DRR/M data should be considered alongside this by governments and international agencies. Many may be preparing for likely SDG data collection needs and it is important the HFA II send out a message on data collection and monitoring, including the need to support independent – very likely academic input. This will then prefigure the SDGs which will be determined six months after the HFA II.

We discuss in the following sections the rationale for these concerns and provide example text for how they might be integrated into the framing preamble, goals and detailed priorities.

Preamble

There needs to be a stronger case made for DRR as core to the contemporary development agenda.

As Section B, paragraph 7 states: “The purpose of the present framework is to manage disaster and climate risk in development”.

To match this ambition the text in the Preamble could be more outward looking and position the discussion as effectively as possible for DRR/M within the development landscape. The text at present talks only to core dimensions of existing ISDR/HFA I activity and fails at reaching out to provide a bridge into development. This demand is challenging, and especially so for UN agencies and government departments with prescribed mandates, but at the same time the lack of a bridge between DRR/M and development has long been recognised as a core barrier to risk reduction and HFA II is an opportunity to send a clear signal of intent and ambition by governments to address this concern squarely. If this could be done it would be the single most important advance in DRR/M and inform also climate change policy on adaptation (CCA) and loss and damages (L&D).

The first paragraph starts well by introducing the key challenge surfaced by monitoring of the existing HFA – to institutionalise action on risk root causes this is important, the second paragraph then establishes some successes, which is also useful to recognise. It is at this point that a presentation of the contemporary challenges facing DRR would be useful to state. These are challenges in the operating environment that are revealed by recent science advances as well as from the expression of dominant development trajectories. Alongside this concern it is recognised that root causes have not been adequately addressed by government with the HFA I regime, together these points can help to frame the direction of change needed in moving to the HFA to its successor framework.

Key dynamics in development that make the context for HFA II distinct from HFA I and call for an approach that more clearly embraces and encourages resilience and transformation are:

(1) Systemic risk and local consequences – loss associated with natural hazard trigger events can spill over to generate vulnerability in health systems, the economy, political stability and ecosystem service provision. There needs to be better understanding of these linkages and how contagion might be contained. This includes acknowledging teleconnected risk brought about by the mediating influence of global markets and especially commodity speculation, in the past we have been interested in globalisation as a dynamic pressure shaping access to assets and vulnerability, now we also need to consider global markets and the production of local scarcity. This has been illustrated in the SREX for example through food price shocks associated initially with drought and crop failure but then magnified through commodity speculation and leading to food insecurity in distant cities.

(2) Uncertainties for risk management from climate change – the adaptation agenda and its integration with DRM has been explored in the IPCC SREX report and emphasises experimentation, information flow, accountability and flexibility in risk governance systems, accommodating DRM to climate change is not simply about raising coastal defences, it is about changing the decision-making calculus and mechanisms of everyday development and risk management as a part of this.

(3) Accelerated production of exposure and vulnerability in dominant development paths is continuing. This is articulated in the standing text but does not convey the urgency it might. We are approaching or have exceeded global limits in the Anthropocene and this is a new planning context – The HFA should have a view on underlying resource use question and the distribution of goods that result, this is a major ‘root cause’ issue.

(4) Shifting rights and expectations for security from risk: there is a shift in national level programming from security from disaster risk as a right, to security being only extended to specific contexts – this can be seen in coastal retreat for example. Retreat of government responsibility and the shifting of the burden of risk management onto individuals have ambiguous implications for equity and risk taking behaviour, but needs to be recognised as a process unfolding in many national contexts. Narratives on resilience and the availability of probabilistic risk forecasting methodologies have allowed this shift as noted, the equity implications beyond a shift from public to individual costs bearing is uncertain but fundamental, especially in richer country contexts.

Taken together these pressures describe the historical moment for HFA II. This moment is distinct from HFA I in the rapidity and scale of dynamism and connectedness in social and environmental systems. This requires a shift in orientation in risk management. Existing techniques and goals for disaster risk reduction are still needed but can only provide long-term risk reduction if they engage in the shifting nature of development. Key here is a move from reducing risk to enable development to bringing risk reduction and development together to identify sustainable and safe development pathways. This in turn can be summarised as a move from resilience (stability seeking) to resilience and transformation (supporting self-realisation and development). The Preamble is an important place to make this key argument in orientation and then to feed this through the detail of the remaining report. The rest of this commentary provides some guidance on how this might be achieved.

There are also key policy reasons why HFA II is important to development and these have not been articulated as clearly as they could be:

(1) Primary here is the inclusion of disaster risk across several of the targets in the draft Sustainable Development Goals. The proposed HFA II text should have as its starting point an ability to connect with these proposed targets – i.e. share text on goals, targets and indicators, and identify ways of helping to generate the institutional architecture, human resource and science to monitor. HFA II should then express the intention to go beyond this and fill in gaps where the SDGs have fallen short. The goals and gaps should be made explicit in the logic of the agenda for defining a new HFA framework.

(2) Similarly, within UNFCCC debates, and IPCC documentation, disasters and DRM have become central, through a focus in climate science and policy on extremes, adaptation to extremes and increasingly on loss and damage. All explicitly site DRM policy and science. The HFA II framework should not be driven by the climate change agenda, but should see it as a point of leverage for high level political support and integration of DRM into wider development sectors. Articulating this opportunity and ambition would be helpful to set the right trajectory for the HFA II negotiations.

Purpose, Scope, Outcome and Goals

The core purpose statement: “ The purpose of the present framework is to manage disaster and climate risk in”, is welcomed.

This is followed by five global targets and three goals. The global targets are quantifiable indicators, the goals are aspirations for policy guidance. It would add clarity either (1) make a very clear the utility of the global targets as a background monitoring system, because of their operating at the global scale and with difficulty of generating national level data (because of inter-annual variability), or (2) to invert the presentation so that the current policy goals are the highest order statements which then are given

expression at the global level by the global targets and this can feed into more the detailed national Priorities for Action. Of these options 2 is preferred as it maintains the profile of the global targets.

The five global targets provide quantitative outcome indicators to track progress on – reducing mortality, reducing the number affected, reducing economic loss, reducing damage to health and education facilities, and increasing the number of countries with national and local strategies. These goals provide a potentially effective mechanism of connecting HFA to the SDG indicators. This is positive (and commented on below). A trade-off is that the communicating strength of quantitative indicators may attain higher profile than the underlying three goals. This is acceptable if the individual Priorities for Action can lead to the generation clear indicators that in turn can allow some analysis of investment in DRR/M status (Priorities) and outcomes (global targets) and vision (goals). The existing text does not express this ambition, if it exists.

Following from the emphasis we give to evidence based policy an additional global goal to indicate this could be: increase number of countries with national and local loss data collection strategies by [a given percentage] by 20[xx].

A number of analytical questions are raised by the selection of global goals. It is, for example, welcomed that mortality is included as the first global goal. Despite progress, this should remain our primary motivating goal for risk reduction. More difficult is to measure (and define) people affected, and how to capture relative and indirect economic loss (ie the loss accruing to the poor which is small in aggregate terms but a huge development burden, and the systemic losses that may be larger than direct loss). Number of people affected can be a proxy for livelihood impacts at the global scale and given data constraints this is a reasonable set of indicators at the global level. Nations and cities should be encouraged through wording in the text to include additional measures of output that can better capture relative and systemic loss.

Across the loss goals, the common metric used is to reduce by a given percentage in function of number of hazardous events. No simple measure will provide a bias free indicator, and for analysis at the global scale this is a reasonable trade-off against data availability and the inter-annual variability of loss. Using percentage allows comparison between countries that will have a wide range of absolute stated losses. It will be important to define clearly the ‘number of hazardous events’ and the time frame for accounting. The greater the number of events against which progress is measured, the more representative the measure will be. Similarly while the ISDR may seek countries to return annual progress a better measure that can smooth out inter-annual variability would be a five year moving average. This would help absorb extreme event effects and reveal underlying risk management progress.

Making some clear connection between these indicators and those used in the Sustainable Development Goals (SDG) will be useful to connect agendas and may allow scope for cross analysis of progress, for example on underlying development indicators and disaster loss or risk management capacity. This is especially important given the timing of the HFA II (March 2015) and SDG (September 2015). If potential targets and indicators in the SDGs are not supported in HFA II this may undermine representation of DRR/M in the SDGs (in addition to overlaps, gaps and incoherence). Building a clear connection between the HFA II and SDG processes and expected administrative architectures may also help to institutionalise data collection alongside that required for the SDGs, which will presumably attract national investment given the emphasis in the draft SDGs on this, and the greater scale of national investment responding to the SDGs will likely attract. The HFAll text also needs to be aware of the UNFCCC L&D agenda so that it can align loss and damage measurement indicators in climate change with wider hazards. The aim should not be duplication but supporting goals, targets and indicators.

We suggest that this section indicates a clear role for science in developing and improving indicators, working to generate infrastructure for data collection and perhaps alternative, parallel metric systems. Text could say in a new 11:

‘Support for the science community at international, national and local levels, and especially through the university sector to help in providing methodologies to determine and measure targets and to standardise quality of data. This should include additional effort in monitoring and measuring response capacities and capacities for resilience and transformation.’

Three Goals are proposed: (1) reduce prospective disaster risk through safe development (2) reduce existing and accumulated risk through preparedness and response (3) building resilience to recover. The areas and logic of these goals is good – but the presentation is unclear. These goals need to inspire national action with clear wording. A simple improvement would be to insert a full stop after the first clause of each initial statement. The goals could also be improved by providing some clear line of sight between them and the Global Goals and Priorities for Action to Goals (even if individual priorities may attribute to more than one goal).

Detailed wording in the existing goals raises two concerns:

(1) In goal II response is noted and this then requires a serious engagement with structures for response, including coordination with the humanitarian sector etc. in the subsequent sections.

(2) Goal II and III imply the end goal is a return to pre-disaster conditions. This shows a significant lack of ambition and is out of line with a considerable body of science work and stakeholder positions that would argue for the post-disaster settlement to aim for improved development opportunity and capacity and improved risk management – through enhanced critical infrastructure, employment training, gender equity, representative governance etc. This lack of ambition for DRR is a major concern. The ambition may be difficult to achieve but this should not prevent its articulation.

Guiding Principles

The ambition of this section could be enhanced by extending the highest level of action from the national to the international. SREX included a complete chapter on the international environment. International action and cooperation is driven by national actors so falls within the scope of the HFA II. International coordination is needed for: tracking and managing teleconnected risk, cross-border hazard monitoring, and the sharing (and so shared costs) of disaster response assets, collaboration to respond to international migration associated with disaster risk and events. These are growing issues and require the HFA II to move more into this direction and beyond technology transfer (point m) and overlapping responsibilities (point n).

Issue (i) calls for accessible and better quality disaster risk information for decision-making. This should include public information on the priorities and capacity of disaster risk management. There is a growing gap between public expectations of security and a retreating public sector that through resilience planning has continued to withdraw. This gap needs to be transparent to avoid emergent risk and social tension. This is a particularly acute concern in high income countries facing economic constraints but has global application as a principle of transparent risk governance.

Issue I and II should include building capacity alongside reducing exposure and vulnerability.

Issue III uses the term ‘disaster resilience’, this needs to be defined as a policy object. Does it mean to connect development and risk reduction, to aim for flexible systems, to prioritise bounding back to pre-disaster conditions? Resilience is not easily compatible with the goal of ‘bouncing back better’, the latter implying a transformative approach to DRM. WE prefer that resilience is used to describe the ability to continue normal functions in the face of risk and impact and that transformation describes those policies aimed at seeking to build risk reduction into development and risk management (and potentially also to secure development gains through risk management. It would be useful to seek ‘disaster resilience and transformation’ to signal this aim.

Two new principles are proposed:

A new principle following from the clearer ambition that bouncing back is not enough: DRR and disaster recovery are opportunities to enhance sustainable and equitable development pathways, mechanisms, governance frameworks and partnerships with all actors to enable transformative and resilient development should be at the heart of DRR.

Across the guiding principles the private sector is rather mute. Following from the observations made above we recommend that the private sector be recast, as a key actor amongst local at risk communities (and including more distant up and down stream business linkages in the supply chain). A new principle could articulate this: Disaster risk management should be built into and across the relationships between business interests to include workers, customers, suppliers and regulators. A collaborative approach to risk management can identify weaknesses in production systems and allow a sharing of risk management costs across a production system.

Priorities for Action

The preamble should include

A) Acknowledgement of the need for a much improved data collection infrastructure at local and national levels to enable standardised data collection. Without this monitoring will not be possible. This is a challenge for human resources and perhaps more of political will. This challenge is a major concern.

B) Extending from resilience to include also transformation

C) Noting the need for collaboration with business and community actors and civil society.

Overall, this section misses the opportunity, and need, to encourage new engagement and positioning of actors in recognition of the changing institutional landscape of development. The result again is a lack of ambition. We have three cross-cutting concerns with this section:

(1) Alongside national level responsibility, generating support for local 'community' and local government action is recognised and continues to be important. The message though could be nuanced to move from primarily supporting capacity at these two discrete levels to a primary agenda for supporting collaboration and the exploring of barriers and capacity building for SYNERGY and collaboration. Faced with extreme events community and local DRR is very constrained and can even project a false sense of security to say nothing of generating an opportunity cost for those who have invested time and energy. Similarly developing national level structures and policy is meaningless in the face of everyday risks that are below the radar of key services and policy development. There is a real need to join up local and strategic planning, to recognise the limits of both and generate a platform for exploring this NEW, post-2015 need. From this position come a range of discrete policy agendas, perhaps most important, certainly from a science viewpoint, is the systematic collection of data on local vulnerability, extensive risk and everyday disaster loss.

(2) The private sector continues to be a Cinderella actor – there is much courting from advocacy and government groups, some responsiveness from the sector through corporate social responsibility and internal business contingency planning, but there is really no systematic approach to seeing business as part of a networked community of actors who need to adapt and reduce risk together to enable prosperity to grow, or be maintained. There are a growing number of examples where viewing private business as an isolated actor leads to risk management failure (business continuity blocked by damaged transport or communication infrastructure managed by public or other private actors or by workers (or consumers) being distracted by damages to their homes). For example, where a Japanese assembly plant relocated to Turkey deployed state of the art building technology to reduce earthquake risk. This was successful in a subsequent earthquake – although production was still stopped because workers homes, local schools and critical infrastructure were not all so well designed. Business is embedded in community and a shift from an actor to a system perspective in planning and from individual responsibility to integrated communities of

interest can offer a way past this impasse. There is also a growing concern surrounding the growth of an international for-profit sector focussed on disaster response and reconstruction. Some comment on regulation of this sector and its contemporary effect on price inflation during reconstruction is important. HFA II is an opportunity to put this on the table and so allow the HFA II to confront contemporary and emergent policy issues. This will reframe business, which moves from being a milk cow for local risk management charity or as a drain on reconstruction finance, and becomes a key partner alongside local government and community actors, potentially also national regulators.

(3) There is very little mention of disaster response and recovery towards enhanced development and risk management status. As noted above the ambition as it stands is limited to a return to pre-disaster conditions. Specific clauses of concern are:

14 A key paragraph to emphasise building back better and transformation. The latter is concerned with building back better (ie enhanced development opportunity) through all DRR/M activity, the former focuses on this through response and reconstruction only.

14 a) systematic data collection should be extended from loss and impact to the performance of emergency response and recovery, the quality of emergency, transitional and permanent housing and other facilities, including governance frameworks and decision-making.

14g) include the role of volunteers in monitoring the delivery of disaster management policy and in the quality of reconstruction.

14h) Go beyond encouraging integration in science to encouraging a closer dialogue with decision-makers and risk management practitioners to better understand the challenges that prevent the movement of science into policy and risk information into action.

New clause 14l) Promote better understanding of and action on the blockages that prevent DRR/M from enhancing underlying development goals so reducing risk in the face of a dynamic social and environmental contexts.

New clause 14m) To develop systematic approaches to better understand the root causes of disaster risk production and accumulation in development pathways and so to be able to position development along more disaster resilient pathways. Systematic work will require close collaboration between science and practitioners communities.

15a) this prioritises the strengthening of economic resilience. It is helpful that resilience is used rather than growth, but still by reducing human life down to economic resilience there is a concern this will undermine wellbeing through reduced attention being given to ecological and cultural attributes. We suggest amending to 'ecological, cultural and economic resilience'. This larger ambition would be in line with the stated text in para 21 for 'investing in social, economic and environmental resilience'.

15a) This is an important example where resilience should be coupled with 'transformation to sustainable and equitable development'. This will flag unambiguously the ambition of moving from resilience alone (risk management to protect existing development) to include scope for transformation (risk management that seeks to enable development to better provide for sustainable and equitable development)

15h) Integration here could mention also connection to the SDG process.

15i) Professionalization is a useful agenda, but this should be paralleled with the extension of 'barefoot' and 'appropriate' technology. This opens considerable opportunity in large informal urban settlements and in conditions of weak or failing states. This is not a poor sister to professional risk management it is a more appropriate methodology for increasing people's access to safer living conditions. The issue is sensitive but to ignore the need to enhance the quality of risk management technology – even where formal systems are absent – is important. Recall that in many large cities more than 50% of the population reside in informal settlements in many ways are beyond the reach of government.

16. It is excellent to see a title which expresses the aspiration of 'build back better'. However under a title which has the aspiration to build back better it is curious that the introductory text speaks only of early warning. There is a need – and here is the opportunity – to enhance response, reconstruction and movement into the post-disaster development space. This is where large gains can be made in HFA II following the success of HFA I in supporting expansion in early warning which has saved many many lives. This is really quite an inconsistent paragraph. Build back better refers to post-disaster action, the policy sites (early warning) is pre disaster and also unlikely to enhance development gain. Greater clarity would come from using transformation instead of build back better to describe pre-and post-disaster opportunity.

16d: This is an opportunity to support risk reduction to enhance development options (ie reduce vulnerability and build capacity). The text could read 'mitigate losses and enable sustainable development'

16e is the only item to focus on reconstruction and its logic is cost saving. This is laudable but again curious. The aim here should be to enhance reconstruction to improve human opportunity and wellbeing – to enhance sustainable and equitable development opportunity through reconstruction. This indicates the need for a further point to articulate this.

17 and 21 we are concerned about the limited scope of '*Investing in Social, Economic and Environmental Resilience*' The paragraph contradicts the aim of building back better, instead it is aligned to a 'return to normality' vision. To emphasise the vision of the HFAII to build risk reduction that can cope with a changing future and reduce risk through enhanced development we suggest the title change to:

Investing in Social, Economic and Environmental Resilience and Transformation

This will require the insertion of more forward looking language in each discussion point that can capture the ambition of creating resources to enhance development and through this to reduce risk – not only to recover from impact.

17 for example, the introduction should include livelihoods, which is probably the most defining cause of vulnerability and source of capacity and should be the first item in the list of local priorities.

18: Understanding Disaster Risk

This is a weak title and could be renamed: *Understanding Disaster Risk and Action*

Focus is on supporting existing risk assessment tools, global campaigns for risk awareness, remote sensing and UN administration for ISDR science input. This is all useful but limited. We suggest explicit support for innovation in science, especially to develop and invest in better methodologies and frameworks to understand why science is not always connected to policy and to catalyse science and evidence based policy making, at all levels of government and into the private and civil sectors. There is a need also to better understand how risk root causes generate risk and loss, and how governments and other actors can move development pathways beyond risk production. These require new ways of doing science, ways that allow closer contact between practitioners and scientists but also the maintaining of critical independence.

A call for national government to support funding for basic research into hazard and risk and more importantly perhaps to support collaboration and integration across the sciences and with policy and practice would be key to move science to the next stage for supporting DRR.

23: Role of Stakeholders

Academia is included but very narrowly prescribed. Science needs to enhance its focus on integrated research for DRR/M and also seek new relationships to enhance the ability of science and other stakeholders to communicate and learn.

This agenda needs to include work on governance, poverty, engineering, medicine, and economics. Overall there must be a clear support for building integrated science models that can address local and structural

concerns. Science advances and mainstreaming of science into development sectors including through new partnerships and roles for the university sector will be a major advantage in generating systematic and coordinated monitoring systems – systems that can be independent, rigorous and decentralised, and for maintaining a critical and independent perspective on DRR/M and its relationship to development.

It would be helpful to include (1) explicit mention of root causes as an area where academia can support policy development, and (2) understanding of communication and science-policy gaps as part of a more serious engagement with risk governance as a subject for study (3) scope for developing integrated modelling work to push forward decision-making capacity on multi-hazard risk contexts, to model indirect impact and teleconnected risks (4) to push forward good enough science agendas where research users including those at risk can coproduce the kind of science that is useful with knowledge providers, (5) emphasise the need for context specific local analysis, as well as scenario based science (6) developing an array of methods and frameworks for monitoring risk and its management at different scale and from different actor viewpoints to support stakeholders in monitoring performance in the HFA II and in consideration of goals proposed by the SDGs.

International Partnership in the Implementation and Follow-Up Process

For any of the comments raised above to gain traction additional emphasis is needed in this section. We suggest the opening paragraph (26) include the following edits:

While it is a primary responsibility of States to manage TO BUILD RESILIENCE AND TRANSFORMATION, there is a strong expectation on the further strengthening of international cooperation and the forging of an international partnership THIS TO BE BUILT THROUGH disaster risk reduction. Managing disaster risk requires an all states and all-stakeholder effort, given the complexity of the task at hand and the relevance for humanity as a whole. BUILDING A SAFER AND MORE FULFILLING DEVELOPMENT PATHWAYS REQUIRES POLICY BUILT ON EVIDENCE. In this connection:

New paragraph 26 c):

The international scientific community including donors should be called upon to support strengthening of integrated research into disaster risk, resilience and transformation. Governments should facilitate support and also seek to facilitate and encourage science to partner with civil society, public bodies, those at risk and the private sector research and practice communities. This can build on existing international science networks such as the Belmont Forum, Future earth, ICSU (and its programme for Integrated Research on Disaster Risk). Governments are encouraged to establish national disaster research committees to enable cooperation, integration coproduction with science users and the international community and provide the institutional and human capital for evidence based policy making and practice.

Transition Phase

28: This statement is restricted to focus only on the Science and Technology Committee of the IRDR. An additional statement and commitment is needed to ensure wider support for international mechanisms for science in DRR/M. We suggest insertion of: "...facilitate the revitalization and transformation, and providing support to, the Scientific and Technical Committee and strengthening existing international scientific mechanisms focusing on risk".

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