

# **THE FUTURE OF DISASTER RISK MANAGEMENT**

## **Draft synthesis document, meeting notes, background papers and additional materials.**

**From**

### **A Scoping Meeting for GAR 2015**

El documento y la discusión que se presenta en adelante es producto de una reflexión colectiva realizada en el marco de las actividades de la EIRD para definir la naturaleza y desafíos para un Hyogo 2 de 2015 en adelante. No es un documento oficial de la EIRD sino un apoyo al logro de sus fines para el futuro, elaborado con el apoyo de 21 profesionales en el tema citados en reunión por la Facultad Latinoamericana de Ciencias Sociales- FLACSO.

Los autores invitan a toda persona o grupo de personas interesadas, la lectura y comentario del documento y sus anexos. Es nuestra intención dar seguimiento al documento a través de un debate y comentario abierto para dentro de un año incorporar los resultados del debate y sus conclusiones en la redacción del próximo Global Assessment Report de las NNUU-EIRD.

Invitamos comentario crítico y constructivo, ampliación de los puntos del debate, ejemplificación de las malas y buenas prácticas insinuadas o mencionadas en el texto, ideas concretas para hacer avanzar la meta de la reducción y prospección del riesgo hacia el futuro y para su integración en las metas del desarrollo sostenible. Interesa de sobre manera ideas sobre transformaciones y acciones hacia el futuro basados en análisis de fallas y aciertos del pasado. Estos deben hacer referencia o relacionarse con aspectos y puntos desarrollados en el documento. Se buscará una forma de socializarse los comentarios sin tener la posibilidad de suscitar un debate colectivo paralelo en este momento.

Para facilitar comentario al documento hemos creado un espacio de trabajo en Prevention Web

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El "login" es **future** y la contraseña también es **future**. Pueden utilizar la función "upload" para ofrecer comentarios en inglés, portugués, español, francés o árabe.

Muchas gracias y bienvenida al debate y la discusión.

**FLACSO** (Latin American Social Science Faculty) and  
**UNISDR** (United Nations Office for Disaster Risk Reduction),

**San Jose, Costa Rica.**

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# **THE FUTURE OF DISASTER RISK MANAGEMENT: An On-going Discussion.**

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## **Background**

On the 18<sup>th</sup> and 19<sup>th</sup> April 2013, twenty one disaster risk and development specialists met at the headquarters of the Latin American Social Science Faculty (FLACSO) in San Jose, Costa Rica for an open debate and discussion on the past and future of disaster risk management. The objective of the meeting, organized and sponsored by FLACSO and the United Nations Office for Disaster Risk Reduction (UNISDR) was to contribute to the scoping of GAR15 (the 2015 UN Global Assessment Report on Disaster Risk Reduction), in particular to identifying key challenges to the effective management of disaster risk beyond 2015. In this sense the meeting can and hopefully will contribute to informing on-going consultations and discussions on the new international framework for disaster reduction that will enter into force in 2015.

The meeting brought together professionals from different regions and from academia, international organizations, NGOs and national disaster risk management organizations. Between them, as one participant commented, they brought to the table more than 500 years of accumulated experience in disaster risk management.

The present document is an interpretive synthesis of the meeting discussions and results and provides a starting point for further and wider debate over the next twelve months. Whilst an attempt has been made to succinctly or indicatively incorporate the full range of ideas and discussion that ensued, inevitably we will have fallen short in completely fulfilling this objective. Through a reiterative process we hope to remedy any shortfalls and omissions.

Finally, it should be made clear that in introducing and discussing different aspects and conclusions there is no implicit nor explicit suggestion that all participants necessarily agree with all affirmations. Rather, this summary attempts to reproduce in logical fashion a narrative that articulates the sum of the different opinions voiced in the meeting. No attempt has been made in this synthesis document to attribute particular ideas to particular participants,

although many of these can be cross-referenced by consulting the key-points document, the detailed meeting notes and preparatory documents provided in the annexes. Also, no bibliographical referencing is offered whilst at the same time accepting that many ideas and notions voiced in the document have and are openly discussed in academia, amongst practitioners and others today. The document thus pulls together some prevailing ideas and, we hope, a good number of new thoughts in a single place, under a single format and with a singular purpose.

## 1. An Evident Contradiction

The Hyogo Framework of Action (HFA) was endorsed by 168 national governments at the World Conference on Disaster Reduction held in Kobe, Japan in 2005. Since then evidence from the self-assessment reports prepared by governments for the UNISDR using the on-line HFA Monitor, highlight an incomplete but nevertheless gradual and continuous progress towards the implementation of the HFA. From this evidence it would appear that nations across the world are making good progress towards the goal of reduced disaster losses and impacts.

National and global disaster loss databases and global risk models, however, tell a different story.

On the one hand, mortality associated with floods, winds, drought and other hydro-meteorological events does seem to be trending downward. Improved development conditions are largely responsible for this reduction in mortality. Outlier events in countries with low levels of human development, like Cyclone Nargis in Myanmar, can still produce massive mortality. However, this serves rather as a case in point that proves the rule and confirms rather than negates the prior affirmation. In the context of improved development conditions, the strengthening of legal, institutional and legislative structures as well as systems for disaster management, early warning, and local capacities for preparedness and response have made an important contribution.

On the other hand, the economic and livelihood losses associated with damaged and destroyed housing, infrastructure, public buildings, businesses and agriculture have been rising at a rapid rate as well as the mortality associated with geological hazards such as earthquakes and tsunamis.

There is thus an evident contradiction between what is apparently a gathering momentum to implement the HFA on the one hand and rising economic and livelihood losses on the other. How is it possible that progress towards achieving the HFA, which should lead to reduced losses, is actually being accompanied by rising losses?

This raises a fundamental question: are losses rising because implementation of the HFA is still insufficient or are losses rising because the *disaster risk reduction* paradigm embodied in the HFA is not really fit for the purpose? In essence, we are asking: if a nation fully implements the HFA will its disaster risks and losses really be reduced? This fundamental question is of great relevance at this particular moment, when the successor arrangements for the HFA are being debated and when nations are considering investing another ten years of effort into a second HFA. If the HFA's implied *disaster risk reduction* paradigm is not assisting nations to reduce their risks, then investing more in the HFA and its successor arrangements could be tantamount to reinforcing failure.

Here it should be pointed out that the problem of disaster risk is not restricted to low and middle income countries. Events such as Hurricanes Katrina and Sandy in the USA, flooding in Europe and the Japanese tsunami illustrate that the need for risk reduction is a global problem that has not been addressed sufficiently almost anywhere. With the onset of climate change, existing climate variability could evolve into known and emerging hydro-metrological hazards that will further

impact regions and ecosystems irrespective of levels of development. At the same time, as economic systems have globalised risks and losses ripple through value and supply chains this means that even those not directly exposed can be at risk.

There are two ways of approaching this evident contradiction. Firstly, it is necessary to take into account that reported progress from government HFA self-assessments is not necessarily congruous with progress on the ground. In other words, nations may be doing less well in implementing the HFA practice than governments believe or have documented in the HFA monitor. In many countries, the shift from response oriented emergency management and disaster preparedness toward the more integral and comprehensive disaster risk reduction paradigm, expressed in the HFA, has yet to really take root. Implementation of the HFA and real ownership of disaster risk reduction by national stake-holders remains blocked in many countries by a series of conceptual, political, economic, governance or instrumental shortcomings and failures.

Legislation is often passed but then never really implemented. Specialized disaster risk management institutions often lack the political authority or technical capacity to influence development sectors. Emerging national policy frameworks, and the new institutions designed to address the impacts of climate change through adaptation seldom build on the existing experience in disaster risk management. Local governments lack the resources or capacities to fulfill the responsibilities that are mandated. Frequently the necessary resources and investments have not been made available.

These and many other shortcomings have been documented and discussed in GAR09 and GAR11 as well as in other studies and reports. So it is fair to say that, with some notable exceptions, the depth of HFA implementation is probably more superficial than most governments would have wanted. Declarations of adherence to the HFA and its objectives do not necessarily translate into real political and economic commitment.

Secondly, the possibility that disaster losses and impacts would continue to rise even if the HFA was in good part implemented is a real one. It is no accident that Priority Area 4 of the HFA, which calls for risk sensitive development in the social sector, urban development, infrastructure and environment, is the area which has achieved least traction and is probably the least understood as regards its policy, institutional and financial implications. This implies that while the HFA did create a space for anticipatory or prospective disaster risk management, this is the space into which most nations have yet to tread.

Implementation of the HFA is still dominated by a paradigm of *disaster risk reduction*. As such efforts and resources continue to be concentrated in emergency management and preparedness, and in corrective or compensatory risk management. The emphasis is still on reducing or compensating disaster losses and damage as opposed to transforming the underlying drivers that generate risk in the first place. The very concept of disaster risk reduction points to addressing risks that already exist. Prospective risk management, that is, attempting to avoid the construction of disaster risk in the first place, is still a distant goal in an age of immediacy. The deepening of the climate change problem will only add to those existing drivers of risk which have not been successfully dealt with. Climate

change drivers and impacts cannot be separated from disaster risk and the need for a transformed development paradigm, whilst the real possibility exists that a significant increase in extremes and their intensities will belie any attempt at successful adaptation in affected areas. .

If countries are making increasing investments in order to address and reduce existing risks while at the same time are failing to address the underlying risk drivers, then more and more effort will be required to intervene an accelerating accumulation of risks. Whilst, as highlighted above, disaster mortality in some types of events are trending down and good case studies and practices abound these gains are often ephemeral and fade as time passes by. New sources of risk generated by both existing and emerging economic and social processes which increase exposure of people and assets are overall growing far faster than existing risks are being reduced. There is no overall evidence to suggest that sustainable development goals are being significantly achieved by reducing the disaster risks inherent in new investments, although advances in this direction may be registered in different countries, sectors and contexts.

While, therefore, in most countries the implementation of the HFA is still incipient, *disaster risk reduction* is rowing against a rising tide of risk construction and accumulation. In coming decades new or accentuated risk drivers such as population and economic growth in exposed locations, pressure on land and water resources, badly planned and managed urban development, increasingly unequal income distribution and economic opportunities, the decline of ecosystem services and climate change and variability will compound disaster risk construction and accumulation at an increasing rate. This rising tide of disaster risk threatens to overwhelm, if not the current, then surely the next generation. That is, a very real tipping point is quickly approaching after which the effort and resources that will be necessary to effect change may exceed future generations' capacity to address the problem. From that perspective, simply extending the HFA for ten years would reflect Einstein's definition of insanity: "trying the same thing over, expecting different results."

The emphasis on reducing disasters and reducing losses, as opposed to avoiding new risk construction, has become conventional wisdom and locked into policies, governance arrangements and instrumental systems. The HFA is interpreted through this paradigm. Disasters are still predominantly seen as exogenous and unforeseen shocks that affect supposedly normally functioning economic systems and societies rather than as endogenous indicators of failed or skewed development, of unsustainable economic and social processes and of ill-adapted societies. The creation of institutional and legal structures for dealing with disaster risk and adaptation to climate change called for by the HFA still means essentially creating exogenous organizations and norms, looking inwards to the disaster risk problem as opposed to being in its centre from the beginning and building on multiple cultures of risk reduction embedded in many societies and institutions.

The present paper examines and details how the conceptual underpinnings, governance arrangements and the political and economic imperatives for disaster risk reduction have developed in a way that guarantees that risks and losses will continue to rise. It then identifies and explores pathways for a reinterpretation,

and eventually for change, not only of the HFA but also of the practice of disaster risk management itself.

## **2. Looking back: bad-star versus down-turn: the conceptual underpinnings of disaster risk reduction**

In many ways we still live in a world of conceptual confusion, which tends to obscure, distort and immobilize rather than illuminate, illustrate and empower. If the conceptual underpinnings of disaster risk reduction are flawed, misinterpreted or misused, then from the very outset the governance arrangements and instrumental systems that flow from those underpinnings will necessarily also be flawed, and as often turns out to be the case, unfit for their intended purpose.

Conceptual models and practice have, since the 1970s, increasingly highlighted how disasters are manifestations of *unresolved development problems* and outcome-based indicators of skewed, unsustainable development processes. Many DRR publications, including all three of the UNISDR Global Assessment Reports (GAR09, GAR11, GAR13) have highlighted this concern, through the analysis of disaster loss data, global models of hazard, vulnerability and exposure, and case studies of good practice. These reports all provide increasingly convincing evidence to support the assertion that exposure and vulnerability to physical hazards are socially constructed through the interaction of economic, territorial, cultural and political processes operating at several different scales.

Even physical hazards themselves are increasingly socially constructed. Many of the hazards associated with extensive risk are produced through the same economic, social and territorial processes that generate the exposure and vulnerability to these hazards. For example, the inadequate management of runoff waters due to the increase in impervious urban space often leads to recurring flooding in downstream areas. Furthermore, the hazardous nature of extreme events such as tropical cyclones, multi-annual drought and major river floods is increasingly mediated by factors such as environmental degradation and land-use, as well as climate change. While earthquakes are natural, their hazardous nature is also conditioned by how territory and land-use is managed. There is a growing consensus among scientists over the anthropogenic nature of climate change, and the hazards associated with it, as illustrated by the SREX and AR5 of the IPCC.

Conceptually, and increasingly empirically, disaster and climate change induced risk is being accepted as endogenous to human development. Nevertheless, disaster risk reduction in practice (from international institutions, national governments, local practitioners as well as members of the academic community) continues to be driven largely by the increasingly outdated notion that disasters are exogenous, unexpected, extreme events that randomly impact otherwise “normally” developing societies. Underneath the technocratic veneer of disaster risk reduction, the view of disasters as “Acts of God” (or “Nature”) still resonates in many places and circles.

Despite forty years of evidence pointing to the contrary, disasters are still regularly described as *natural disasters*, even in specialized publications and forums. The key driver of disasters is still considered to be large-scale physical events (extreme events), which are often taken to be synonymous with the disaster itself. While social research has prompted a shift towards vulnerability-based paradigms and toward the recognition of extensive risk, the focus on modeling *extreme events* and their impacts continues to be dominant. According to some observers, the climate change discourse and research has reinforced this tendency. As such, disaster risk is conceptualized as an externality to be managed, the act of a “*bad star*” (Latin: dis-aster) that must be prepared for, and not as a socially constructed problem driven by underlying processes whose neglect eventually manifests as a predictable, and always tragic “*down turn*” (Greek: catastrophe). A certain tendency for nature to be erected or re-erected as the principle “enemy” has now returned. This is associated with animism and the dotting of nature with human characteristics- the reference to so-called “assassin” storms, “killer” earthquakes etc.

The continued dominance of exogenous disasters over endogenous risks in the conceptual frameworks and imaginaries constructed around disaster risk reduction spills over into language and praxis. The language of disaster is one of malaise, loss and damage. Disaster risk reduction has fallen into the seductive use of a language of deficit and negativity, becoming trapped by the concepts it harbors and promotes. In contrast to this, the broader language of risk brings concepts of transformation, opportunity and stakes, trade-offs, earnings and human and ecosystem security to the table. These opportunities usually become visible immediately after disasters, sometimes leading to a temporary *un-freeze* of the disaster risk reduction paradigm and the associated social, political and institutional mechanisms. However, the opportunity for transformation and change is rarely seized on before pre-existing mechanisms lock back into place.

Risk should be seen as a normal and inseparable part of economic activities and development: it signifies or may signify earnings and benefit for some, whilst damage and loss for others; or earnings and profit at one time and loss and damage at another according to the ways the resource-hazard continuum plays out historically. However, within the disaster risk reduction community, risk is considered *de facto* to be a negative variable to be minimized, as opposed to just another attribute of human nature, one that can actually be beneficial, when properly understood and managed, much in the same way that a flood or volcanic eruption is both resource and hazard.

Under the paradigm of disaster risk reduction, risk has become abstract and compartmentalized and its dependent relationship with development processes has been blurred and obscured. The vision of disasters as exogenous events has led to disaster risk becoming established as an independent field of inquiry, rather than a much more complex, integrated, and mutually influencing process where financial, health, economic and social risks are considered as both facets and at the same time contributing factors in an interdependent process of risk creation, accumulation, mitigation, transference, and at some point, actualization. This more holistic vision of risk is coherent with the idea of a risk continuum and a linked set of incremental, systemic, transformative adaptation and evolutionary responses.

The separation of disasters and disaster risk from development processes fosters technocracy and technocratic and bureaucratic approaches to disaster risk reduction, which then in turn further feed the dominant concepts and imaginaries in a self-reinforcing manner. By objectivizing disasters and risks, disaster risk reduction has disconnected itself from local and sector development practices and has instead constructed itself as an autonomous, specialized, apolitical area of intervention and concern. Risk becomes personalized as an object while those who participate in either risk construction or risk management are left on the periphery.

Despite the “holism” promoted by many today, real practice is fragmented and dominated by segmented or sector specific approaches. This occurs at the national and international level, where interventions (focuses, rhythms, timing, etc.) are determined by agency (mostly administrative rather than operative) and not by territorial priorities. At the same time there are insufficient process-oriented policies, strategies and actions. Most are product oriented, as are the indicators with which risk reduction is measured. This is contrary to many observed biological and ecological processes that have successfully enabled adaptation at the organism, species and ecosystems level and provide useful analogs to learn from. The challenge however is that anthropogenic risk in co-evolved socio-ecological systems is being created and concentrated at rates that are rare in natural systems. Hence response and adaptation times are being compacted, as respite time contracts. Anthropogenic risk, such as climate change, also has cascading effects, and feedback loops that reinforce and magnify its effects. An example of this is how as the tundra melts with soaring temperatures, the methane currently locked in the frozen bogs of Siberia and Northern Canada will be freed, further compounding the greenhouse effect. A runaway world produces runaway risks.

The construction of disaster risk reduction as an autonomous sector, concerned with protecting economic sectors and society from the impact of exogenous and extreme shocks has isolated it from the mainstream concerns of government in general, including economic growth, employment and food prices, or in the case of local governments, water and power supplies, transport and waste management. Silos are created, technocracy is instilled and promoted and technical prowess, as opposed to effective decision maker and/or stakeholder engagement, dominates practice. The lack of real political and economic commitment to disaster risk reduction in many countries reflects its isolation from real political and economic imperatives.

In the private sector, risk considerations are also often limited to financial risk and internal rates of return on investment. In the best of cases disaster risk is considered an externality rather than reflecting complex interrelationships between development and society. Development gains are privatized and disaster losses socialized or usually subsidized by the public sector or treasury as residual risk.

While there are many stakeholders in disaster risk, it is often unclear what stakes they actually hold, and how this may relate to the bigger risk picture. While efforts to measure risk have become increasingly sophisticated, it is still rare to identify, and much less quantify, which stakeholders bear the risk or contributed to its

construction. Neither is there a clear identification of those that should be called upon to engage in explicit risk control and risk reduction practices, as a responsibility supportive of the areas of interest of the stakeholders being confronted. Conventional risk paradigms have tended to concentrate risk by default or design around the most vulnerable communities and regions during the process of concentrating capital, knowledge and institutional capacity as part of the 'development' process.

Imagining disasters and risks in this way underpins the conventional disaster risk reduction paradigm: by reducing the risks, the magnitude of loss or realized risk is reduced. Disaster risk reduction is understood as *protecting development against* a tangible external threat. As disaster risk is a *thing* then tangible instruments ranging from response and preparedness, to corrective risk management and insurance, can be designed to reduce that "*thing*". This represents a product oriented approach and action framework, designed to protect precisely the economic processes and relations that are generating the risk in the first place.

Because of this focus on disasters as exogenous threats to otherwise "normal" economies, the need to *develop* in a different way, in a way that avoids generating new risk conditions, cannot possibly gain traction. The very term disaster risk reduction points to reducing risks that are there rather than addressing the processes that generate risk in the first place. Terms like *financial protection* point towards protecting public finances against external threats, rather than recognizing that the way those finances are used can either reduce or accelerate risk accumulation.

How disasters and risks are conceived is therefore of critical importance. The imaginary of disaster risk reduction (and previously, disaster reduction) has influenced both how the problem is defined and constructed as well as how the governance arrangements, incentives and instrumental systems developed to address the problematic have been designed. As a consequence, disaster risk reduction has become, at best, an add-on to development and, at worst, an autonomous sector largely removed from development processes. In essence, disaster risk reduction has become a band-aid that is applied to development rather than an essential and defining characteristic of development. Moreover, disaster risk reduction and climate change adaptation are like "airbags" or "cushions" that inflate (often too late) when there is a crisis but under other circumstances receive very little attention or finance

### **3. Risk governance and institutions**

That the disaster risk reduction sector reflects an imaginary of protection against external shocks and threats is reflected in its conventional use of terminology. There are Ministries of Disasters and Emergency Management not Ministries of Resilience and Sustainability, for example. In contrast, other sectors or areas have Ministries of Health not Ministries of Illness or Ministries of Public Safety not Ministries of Crime. Emphasis where disasters and risk are concerned is constantly placed on losses, hazard, exposure and vulnerability- but rarely on the positive social and economic attributes that can result from effectively managing

risk. At the same time, however, the creation of Ministries of Sustainability or Resilience for example could run the fate of many existing institutions and organizations for disaster risk reduction in that this could lead to other areas of public practice seeing themselves as being relieved of responsibility.

Over the years, the governance arrangements for disaster risk reduction have evolved from stand-alone mechanisms for disaster response (such as civil defense and civil protection organizations) into more sophisticated and comprehensive institutional systems. These systems typically have decentralized territorial structures, based on a principle of subsidiarity and where responsibilities are assigned to regional and local governments, as well as mechanisms for cross-sector coordination, via a variety of committees, platforms etc.

But irrespective of their degree of sophistication, they are largely defined by syncretism, (the process of adding on to existing structures and goals as opposed to thoroughly redefining the problem and its solutions and the needed supporting institutional structures), leading to a form of institutional myopia. The governance arrangements for disaster risk reduction have evolved institutionally in closed silos, from a starting point of disaster response. As such they are challenged to reflect the inherent complexity and interrelated nature of risk.

Disaster risk reduction has been constructed as a sector, independent of others, with its own logic and specialist personnel, a “sector created by and for specialists”, reinforced many times by considerations of job creation and preservation, the preservation of the status quo that created the institutional space, and the search for implicit or explicit power and control over roles and functions. These institutional systems implicitly reinforce the perception of risk as exogenous to development, either objectivizing the risks or else by externalizing them somewhere into the commons, meaning that individual risk makers are not answerable to risk bearers. This approach, which denies processes of risk accumulation, also inhibits any real possibility of taking advantage of traditional community based knowledge systems. Such communities are many times “intuitive” experts” in risk management and adaptation and intuitive generators of knowledge under other scientific paradigms

Within the diverse institutional arrangements and legal frameworks that exist, an increasing number have taken on board modern risk management concepts and terminology, including the explicit highlighting of the link between risk and development. However, there is still a huge gap between discourse and practice. The evidence from government HFA self-assessments highlights a continued and fundamental preoccupation with preparedness and response together with corrective and compensatory risk management. While in discourse (as in the HFA) there is room for anticipatory or prospective disaster risk management, in practice these approaches rarely gain traction. As long as *prospective disaster risk management* is shoehorned into structures built on an imaginary of exogenous disasters, the possibility of addressing underlying risk drivers will continue to be remote. Moreover, concepts are used and abused to justify different things and have and can become smoke screens for carrying on with the same approaches but using updated and “correct” etiquettes. This was seen in the 90s when “disaster prevention” units were set up in many national disaster organizations

but referring mainly to disaster preparedness rather than risk management and reduction.

In general, there is little evidence to show that risk governance arrangements built on the disaster risk reduction paradigm have successfully intervened or modified the underlying risk drivers. When institutional systems have enjoyed strong and charismatic leadership they have undoubtedly been more effective. But these advances have usually been fleeting and have not led to any real transformation of development. At the same time, while there is considerable evidence of good development practices that do lead to reduced disaster risk, these practices (such as improved building codes, incorporation of risk reduction criteria in public investment decisions or environmental management) these have normally been promoted by other sectors without an explicit linkage to disaster risk reduction institutions. Moreover, when environmental management, risk management and climate change adaptation are successful this is rarely highlighted. Only where they fail is attention placed on these practices.

While the governance arrangements for disaster risk reduction may be backed by policies or even legislation that requires risk sensitive development, the translation into on the ground implementation has met with mixed success, even in many high-income countries. Often, passing new laws is an excuse not to enforce existing ones. The creation of a culture of compliance of laws that are already on the books, rather than the generation of new laws and norms, has often been ignored. Dealing with informality as opposed to formality also has received little attention. Land use zoning, building codes and environmental regulations are all regularly distorted by implicit or explicit corruption as the implacable logic of privatizing short-term gains and socializing the resultant risks to other sectors through space and time takes precedence over considerations of sustainability. Corruption is undoubtedly of increasing relevance in the analysis of disaster risk and should be given far more attention than has been the case up to the present.

The imaginary of disasters as extreme exogenous shocks discourages considerations of accountability and responsibility. Stakeholders and decision makers are amorphous groups and not always easily identifiable, and each hold different stakes in the risk equation. The need to influence and incorporate them is usually called for, but little real analysis has been undertaken as to who these stakeholders are and what stakes they hold. The disaster risk management discourse is rarely related to concrete on the ground concerns of households, businesses and communities.

The fact that territories of risk construction do not always coincide with the territories or space of disaster impact further complicates the spatial and jurisdictional disconnect between risk constructors and risk bearers. And, globalization and the high degree of connectedness of risk further add to the complexity of the problem.

Risk governance arrangements are often characterized by the absence of accountability. No ombudsman, chief risk officer or similar figure generally exists with reference to disaster risk, and disasters are rarely submitted to a deep forensic analysis in order to reveal causal processes and risk generators, as is the case with air traffic or technological accidents. Nature is still assumed to be the culprit and government compensation or insurance is all too frequently assumed

to be the solution: the human right to security is still overshadowed by the dominant discourse of inevitable “acts of nature” or “bad stars” that dilute responsibility and accountability from the tragically recurring “down turns”.

Mechanisms through which risk constructors can be held to account by risk bearers are generally not in place or do not function as such. Whether laws and regulations are implemented, or ignored, is rarely monitored and evaluated. Studies on how disaster risk is constructed continue to be published but rarely have a lasting impact. And development sectors themselves are also influenced by the dominant imaginary of disasters as exogenous shocks.

The failure of disaster risk reduction in countries with constrained fiscal spaces and high levels of national debt, is further exacerbated by their inability to dedicate the financial resources needed to *correct* existing risks. The role of international financial institutions in facilitating debt-financed risk accumulation in such countries, through lack of control over risk construction in infrastructure development, for example, has not been seriously analyzed, nor has the impact of international organizations “implanting” homogenous models of legislative and institutional systems which countries are then unable to resource or implement. Paradoxically, the same international financial institutions that financed risk accumulation are now promoting insurance pools to strengthen countries economic resilience and to avoid financing gaps.

#### **4. The political and economic imperative for disaster risk reduction**

Manifestations of disaster risk, ranging from disasters with a *global* scale such as the 2011 Thailand floods or East Japan earthquake, to nationally significant manifestations of extensive risk, such as in the 2010 / 2011 ENSO event in Colombia and Central America are increasingly costly to governments, citizens and businesses. Yet despite these growing impacts the imperative to address the underlying risk drivers remains weak.

The imperative for disaster preparedness and response has always been strong, and the imperative for investments in corrective risk management and risk financing is growing in concert with increasing losses. But with exceptions, such as the attempts in various countries to incorporate disaster risk considerations into the planning and evaluation of public investment projects, commitment to prospective risk management exercised as part of development planning is still an outlier on the political horizon. The fact that disaster risk reduction has been delinked from central social and economic concerns and constructed as an independent sector has not made it easy to build a strong imperative for the respective finance and planning ministries.

At the same time, the logic of disaster risk reduction has been couched in cold economic terms particularly focusing on the possible impact of intensive events at the extreme end of the loss spectrum. While dramatic when they occur, it is difficult to bring these risks onto the political agenda and make them an ongoing priority for decision makers and politicians. Fear of rare future events rarely influences political decisions, which are regularly made by playing off potential long- term benefits against short-term imperatives. Reducing hypothetical losses and avoiding theoretical impacts does not gain political traction at any level, as is

becoming patently clear with climate change. Politicians rarely get elected on a platform of avoiding losses.

Efforts to broaden the spectrum of concern, by focusing on extensive risk and recurrent small and medium scale disasters has likewise not gained traction, in part because of the invisibility of the impacts. A good portion of the losses affect low-income households, informal businesses or small enterprises that seldom show up in “official” indexes. On the public infrastructure side, extensive risk losses are rarely measured. Extensive risk often does not pose a threat to strategic and often transnational economic interests and therefore seldom has a strong proponent to push for the necessary economic and political agenda in most countries.

The continued focus on high level extreme events and physical hazards, rather than on how hazards, vulnerability and exposure interact through development processes, further removes disaster risk reduction from policy choices on economic, social and territorial development. This tendency has been reinforced by that part of the climate change and disaster risk discourse which emphasizes extreme events instead of on the long-term risk continuums that need to be addressed.

In both disaster risk reduction and climate change adaptation there is a growing enthusiasm for insurance and other forms of risk financing in order pragmatically to protect against sovereign risk and theoretically to strengthen resilience. In theory at least, governments are responsible for the security of their citizens and thus the resilience of citizens should be, almost by definition, a public sector concern. However, the development of risk financing schemes normally reflects a narrower notion of the state. Often it is government and its international financial arrangements that are protected against disasters but not the nation and the many individuals of which it consists.

Since disaster risk reduction has been created as a separate and autonomous sector, its links with other kinds of risk, ranging from financial and economic to social and technological risk, has been lost, if it had ever been found in the first place. The root causes of the global financial crisis that erupted in 2007-2008 and the causes of disaster risk accumulation both can be found in the dominant logic of economic growth. The disaster risk reduction discourse touches on economic impacts and on livelihood security but the links to how cycles of capital production and accumulation generate different kinds of risk has not adequately or thoroughly been made.

Disaster risk reduction is even more removed from economic policies and from debates on economic futures than it is from the different development sectors. Where risk analysis looks at the impacts of extreme events, the analysis is generally restricted to the immediate effects and impacts rather than to identification of how economic processes generated the risk in the first place and how direct and indirect impacts then run through the economy affecting future development in diverse ways.

Despite the now well-established premise that disaster risk and disaster are manifestations of the everyday risks that characterize low-income urban and rural households around the world, the links between disaster risk reduction and poverty alleviation and reduction are still tenuous.

Education and public awareness programmes on disaster risk reduction are still dominated by the role of preparedness and emergency management and therefore again tend to obscure and hide processes of risk construction and accumulation. Predictably, popular music, novels, film and song continue to predominantly highlight the dramatic and exotic nature of extreme events rather than the underlying conditions of risk that characterize unsustainable development: there just isn't any sex appeal in working hard to have nothing happen.

The organization of disaster risk reduction implementation around short-term projects again reflects a vision of disasters as events to be handled rather than risk accumulation processes to be engaged and actively curtailed. The project based approach leads to repetition and unsustainability, while the lack of monitoring and empirical evidence of success or failure further reinforces the lack of buy-in and commitment for all but the most conservatively conceived of projects.

## **5. Looking forward: towards a new imaginary of disaster risk management**

The complexity of the contemporary world and the velocity of the interconnected economic, social and territorial drivers that are transforming it are too great to be captured in a specialized knowledge domain called disaster risk reduction.

As highlighted in the previous section, the construction of a sector called disaster risk reduction on the basis of an imaginary of disasters as exogenous shocks has in itself guaranteed that risks will continue to accumulate.

The increasingly evident contradiction between, on the one hand, increasing progress towards achieving the HFA and, on the other hand, growing levels of disaster risk and losses looms heavily on the conventional disaster risk reduction paradigm. This does not of course mean that the corrective and compensatory approaches have not produced benefits or should not be continued, especially given existing levels of risk and the impossibility of reducing many to reasonable levels. It does however mean that such projects must be dramatically complemented with more fundamental approaches that directly influence risk drivers derived from skewed development processes.

Once the notion that disasters are exogenous shocks affecting normally functioning economies becomes ingrained in concepts and imaginaries, anything that flows from that notion will be flawed from origin. Investing additional efforts and resources through an unreconstructed HFA2 will only reinforce that failure.

Getting rid of both the "disaster" connotation as well as the "reduction" paradigm would therefore seem to be essential preconditions towards moving towards a more integrative risk management practice. An understanding of disaster risk as a holistic and endogenous characteristic of particular development pathways and practices, and which is constructed through day-to-day decisions by those who have stakes in those pathways and practices, implies a very different approach to disaster risk management. Disaster risk management then becomes a question of development choices and its relationship to the values, ethics, morality and equity that underpin those choices. Similarly, the measurement of development gains through, for example the Human Development Index, should be complemented by

ways of adequately capturing the advantages of a reduction in disaster losses in development indices.

The starting point for change, therefore, must begin with the establishment or acceptance of a structurally sound and widely applicable conceptual paradigm and a fresh imaginary of risk and its management. **The recognition that disaster is predominantly an indicator of unsustainable development should be taken as the starting point.** This implies a shift in focus from reducing existing risks to addressing the development based drivers and processes that lead to the accumulation of disaster risk in the first place. Sustainability implies the construction and accumulation, not of risk but of resilience and transformative capabilities in society and its communities. It also suggests a series of values and aspirations, such as inter-generational solidarity. Managing current disaster risks better will probably be the best way to address future risks.

The major goal of disaster risk management, therefore, should not be the reduction of disaster loss per se, measured in cold economic terms, but rather in terms of encouraging sustainable development and human welfare and well-being. Put another way, disaster risk management could generally be understood as a series of risk-sensitive development processes. This implies making development choices explicit and how investment decisions, by the private, public sector and households are made in the context of an economic and social development processes that generates chronic/every-day risk, extensive risks and accumulations of intensive disaster risk.

It also means explicitly recognizing the links between privatized economic benefits, on the one hand, and socialized risks, including disaster risk, on the other hand and the different channels through which risks are accumulated, shared and transferred, between sectors, in space and in time. Disaster risk, as with other types of risk, is constructed as much on the resource, capital and output side of the development equation as on the hazard and potential loss side. Understanding this would also help to address how one sector's adaptation or risk management, could be another sector's bane or heightened risk. This is and has been relevant as a conclusion in many cases from different types of economy from free market capitalism, through mixed economies to communist.

Understanding risk also means understanding the sustainability and opportunity embedded in resource use and locational choice. Risk and risk taking are natural to human existence and risk is an inevitable construct where human growth and development are to be found. This implies that a new paradigm should be structured around managing rather than reducing risks and identifying trade-offs between the benefits that accrue from assuming certain risks, the potential price to be paid for taking these risks and the external and shared benefits and costs. And, ecosystems' dynamics, needs and "priorities" must also be taken very much into account, not just human needs and priorities.

This implies that instruments and strategies deriving from multiple other areas of public policy such as poverty reduction (and the need to rethink the meaning of "poverty" and "wealth"), land use planning, environmental management, provision of clean water, adequate wastewater and drainage facilities, etc. will be the primary instruments for managing developmental disaster risks. Rather than having to mainstream disaster risk reduction into development, disaster risk

management then becomes *inside* development. Managing risks becomes seen as a “normal” co-benefit of day-to-day development planning, human development and investment, rather than as a stand-alone sector.

Many of the concepts required to underpin such a change already exist. But the adoption of concepts depends on values and imaginaries. Reality is arbitrary, it is what we allow ourselves to see. We create the world. The imaginary of extreme, exogenous events needs to be replaced by an imaginary of managing risks in day-to-day development processes. Disaster risk management then ceases to be about managing disasters but rather about the sustainable and equitable management of land and water resources, energy efficient building and other such development choices. We should perhaps cease to speak of “developed” or “developing” countries and start to speak of “sustainable or adaptable” or “unsustainable and non-adaptable” countries or countries whose “sustainability depends on the unsustainability of others”. This also requires indicators that allow us to measure these things, including a modification and amplification of the Human Development Indicator.

Whether or not such a new imaginary can take root depends on the values that underpin those development choices. If economic values continue to prioritize short-term gain over longer-term sustainability and the privatization of gains and the socialization of risks, then the prospects for such an approach to disaster risk management are slim. But if those values shift towards human centered development based on equity and sustainability then managing risks can become an integral part of development decisions.

## **6. Embedding risk governance**

So-called risk governance is essentially a component of development governance, related to issues of social justice and equity (which include environmental justice and environmental equity, for which real risk management is a tool). A new approach to risk governance must closely consider how to holistically integrate the frameworks for the promotion of development goals at the national and international levels, including the Sustainable Development Goals- SDGs, HFA2 and the UNFCCC. The fact that different and largely separate frameworks are currently being developed for sustainable development, disaster risk reduction and climate change adaptation reinforces the silos in which these paradigms are currently evolving.

This implies a responsibility of the international community, given that these frameworks tend to be imitated at, and thus reinforce silo-based approaches at the national level. No one model of risk governance can exist that is appropriate for contexts as different as Somalia, Small Island States or large states such as India or the USA. But some general principles can be put forward.

Rather than specific disaster risk reduction institutions, legislation, policies and programmes, disaster risk management should be seen as part of the normal business of sector ministries and territorial (local and city) government. In other words, building safe schools should be second nature to the ministry of education. Ensuring a sound waste management system (which, as a co-benefit leads to less

localized flooding typically caused by garbage blocking storm drains) should be second nature to a municipal government.

The figure of a government chief risk officer or risk ombudsman that is responsible for providing a holistic vision of risks in a country (or at the sub-national scale) and overseeing compliance across sectors or territorial governments could be a way of ensuring a level of accountability that is currently not achieved through disaster risk reduction systems.

This in turn requires awareness of the impact on sectors or territories of any other given sector's policies and/or changes in strategy. This is analogous to the Rubik cube, where no matter how one rearranges the blocks, the centre block of each phase can turn on its axis but should not be moved out of place: without understanding the inherent limitations of the different stakeholders, it will be difficult to solve the puzzle. There will always be tradeoffs: attracting foreign direct investment often goes in parallel with loosening employment regulations and tax regimes. Strengthening environmental rules may have impacts in short-term economic gain etc. However, as in the centre piece of the Rubik cube there are unnegotiable or non-moveable priorities which are those that guarantee the sustainability and viability of any territorial unit, its population and resources.

Such an approach to risk governance requires the development of instruments that increase accountability and responsibility for risk construction and addresses the general lack of compliance with laws, professional norms, guidelines and standards. This requires the development of transparent and applicable methods to put a price on risk generation activities, so that risk ownership and transfers can be made explicit and enforced. Mandatory or voluntary certification may provide another vehicle for making risk ownership explicit. Decision makers require tools to make the right decisions. But, households and communities also require tools to impel their decision makers to adequately manage risks, or risk removal from office themselves.

Risk governance would have to embrace and work more from the reality of informality than it does today. While conventionally an "informal" sector is considered to be outside of the "formal" sector, much of what occurs in the formal sector is actually informal and vice versa. For example, activities such as badly planned urbanization and environmentally damaging mining may have fulfilled certain legal requirements. However, they are not "legal" from the perspective of the ecosystems and communities that are negatively affected.

This requires rethinking risk governance through lenses such as citizenry, human and children's rights and developing mechanisms where partnerships between civil society, business and government become the norm rather than the exception. The human rights paradigm may provide a mechanism so that citizens can demand protections for both the present and future generations. And also be guided by principles, such as *in dubio pro-natura*, which underpins most environmental law, and by which when there is a doubt as to the impacts of development on nature, always favor nature.

Risk governance cannot be only a governmental responsibility. Households and communities need to develop a culture and framework of risk governance that can

allow them to manage risks according to their own specific needs and reality. This could include a more social approach to the enforcement of regulations as well as a move towards approaches based on experiential learning and endogenous actions.

From that perspective risk governance needs to be thought of as a development “practice” rather than just as a set of governmental policies, rules and regulations. Currently, there is a momentum in a number of areas, ranging from green building and organic agriculture to new approaches in utility provision highlight the potential of innovative alliances between civil society groups, communities, businesses, and local governments.

These new forms of governance, structured around partnerships and networks which include ecosystems, watersheds, rivers and creek, slopes, etc., rather than hierarchies and technocracy, and based on social demand and business opportunity, echo and take advantage of transformations in the structure of communication and information flows, through social media, mobile devices and other new technology. Visualizing risk governance as a development practice would also facilitate a transition from the current segregation of research from practice in favor of a more integrated and horizontal approach to generating and sharing knowledge.

Such an approach requires open source risk information at a scale and in a format that enables dialogue on risk and its ownerships directly between stakeholders. The combination of new communication technologies together with open access risk information can empower networks of citizens, households and communities. This can in turn facilitate dialogue with business and government around risk management priorities and strategies. Within such a vision, good governance would be redefined in terms of how well risk is managed for all.

Finally, there is a need for new educational approaches and methodologies, from basic school to post-graduate studies. For transformative adaptation to be possible all careers and professions must be redefined in terms of their responsibility as risk-creators or successful risk managers.

## **7. Building a political and economic imperative for disaster risk management**

The separation of disaster risk management and adaptation for global change from development along with the fact that most so-called stakeholders do not have clearly identified or defined stakes in how risks are managed, has conspired against political and economic commitment to disaster risk reduction. The fact that prospective risk management is a co-benefit of sound development has not been widely understood or exploited. The reduction of losses and impacts is not attractive in terms of political kick back. And conversely, post disaster reconstruction opportunities provides a perverse incentive for inaction.

Very few politicians, nationally or locally, have won an election on a platform of reducing future disaster losses and risks (but they have on the basis of promises to increase security and reduce crime, decrease the incidence of disease and traffic accidents). If an imperative for disaster risk management is to take root it has to

not only be defined in cold, quantifiable economic terms but must also take into account considerations of political opportunity and political risk, human welfare and well-being, justice and equity.

The imperative for disaster risk management should therefore be defined primarily in terms of positive development benefits (which is also a call for new and sensitive/sensible indicators), rather than strictly and uniquely in terms of the avoidance of negative consequences. Local elections can be won by providing clean and plentiful water, clean cities, reliable transport and infrastructure and a safe and healthy environment. Disaster risk management should in a sense be considered a normal co-benefit of good development practices. In essence, the imperative is for good development, and good development must necessarily internalize, compensate, resolve or manage the risks it generates.

Reframing the disaster risk management paradigm in this way shifts the stakeholder focus from specialized technocratic agencies to those involved in everyday development processes, at all levels. Incentives for sustainable development are already increasingly in place as the values that underpin our economic system change as a result of the increasingly visible consequences of four decades of neoliberal-inspired development. Educating the young on this paradigm is therefore a critical strategy for achieving the elusive incorporation of prevention in prevailing cultural norms (as opposed to the incorrectly constructed notion of creating a separate “culture of prevention” which as with disaster risk reduction creates the image of exogenous risks and disasters) we would all like to see. User-centric design and social marketing strategies should be used to help spread the relevance and ubiquity of thinking in a sustainable manner, as much about recycling as about minimizing risk.

The disaster risk reduction paradigm implies that governments increase their investments in corrective and compensatory risk management. The lack of resources for disaster risk reduction then becomes a critical limiting issue in many states. In contrast, a more integrative disaster risk management paradigm focused on anticipatory or prospective risk management and sustainable development does not necessarily require significant additional financial resources and can in fact be promoted as a way to reduce the cost of development. Again, instead of being constructed as a separate sector, disaster risk management then becomes a normal characteristic of sound development practices.

By linking disaster risk holistically to other kinds of risk, including those of financial and economic origin, any macro-economic policy would also take into account the potential macro-economic impacts deriving from latent disaster risks. Once again managing disaster risks would become a normal part of managing a countries economy and finances.

Fundamentally the imperative of resilience and its implication of protecting or strengthening existing social and economic structures, needs to be replaced with an imperative of transformative development that the impact of processes like climate change may accelerate. Disaster risk management would then become a characteristic of the transformation of development pathways and practices based on principles of equity, efficiency and sustainability.

## 8. The implications for HFA2

The discussion presented above has several obvious and direct implications for the successor arrangements to the HFA currently under discussion.

Firstly, it is clear that an HFA2 that represents a direct continuity from the approach taken in the existing HFA will only reinforce a paradigm that has been inconclusive at best and a driver of institutional risk at worst. Strengthening the disaster risk reduction paradigm will not lead to reduced risks or losses or more sustainable and equitable development. It will simply reinforce the status quo.

However, the current HFA does leave scope for change and innovation. Priority Area 4 of the HFA on Underlying Risk, points towards the new development-centric paradigm of risk management that needs to be adopted. If an HFA2 can be turned inside-out so that Priority Area 4 becomes the overarching goal and objective, then it may become an instrument for a much needed paradigm shift. If, in addition, HFA2 stresses the holistic nature of risk and rather than stressing governmental legislation and institutions is supportive of the more organic, networked initiatives of citizens, businesses and local governments towards equitable and sustainable development, then it can very well have a transformative effect on our societies.

Such an HFA would require a monitoring framework that measures outputs and outcomes rather than just inputs. And closer scrutiny should also be afforded to the accountability of risk reduction policies. The limitation of the current HFA Monitor is that it measures inputs, such as legislation and risk assessments, rather than whether risks are actually being reduced.

Another implication is that the new HFA should be *inside* the SDGs. A specific SDG on disaster risk reduction that links to a specialized HFA2 would again highlight the separation of risk from development. On the contrary, disaster risk management should be implicit in all the SDGs.

Whether or not the considerations expressed in this document can influence the negotiations around HFA2, the SDGs or a new climate change protocol is unclear. The current momentum in these negotiations is still anchored on a notion of disasters as exogenous events and disaster risk reduction as a sector. The ambiguous way concepts such as resilience have now been woven into the discourse of both disaster risk reduction and climate change adaptation, has further muddied the conceptual waters. Resilience is implicitly or explicitly presented as protecting the development processes and forms that constructed risk in the first place, a schizophrenic construct that has now become a mantra at all levels.

Imagining a new conceptual framework for risk management, developing governance arrangements that bridge and integrate holistically rather than isolate risk, and which emphasize accountability and responsibility, identifying transformative development practices that can attract political and economic support and using social networks, education and design as paradigms for making risk management sexy and attractive must become priorities if disaster risk is not

to reach critical levels. HFA2 will only be useful to the extent that it leaves space for innovation in these areas.

## **ANNEX A: Key Points**

Key points & meeting notes compiled, edited by C Lavell

Date: May 15th, 2013

### **Categories & Themes**

In the synthesis of key participant points the following general categories were used:

- Challenges- The high-level difficulties that need to be addressed in order to implement measures to control or reduce risk.
- Concepts - The concepts, conceptual models, notions or visions that we consider most likely to hold true for constructing risk reduction management interventions.
- Obstacles - On the ground problems and issues that impede Risk Reduction-RR- from moving forward
- Solutions - Tangible steps that can be taken to bring RR to the forefront and move it forward

The key comments have been classified into the following loosely structured themes that recurred during the meeting, in an attempt to provide some degree of structure:

- Framing the Problem
- GAR 15
- Pressure Points
- Global vs Local Based
- Input vs Outcome Measurement
- Technocratic vs Humanistic Focus
- Specialized vs Integrative Collaboration
- Stake-holder vs Decision-maker Engagement
- Disaster Development vs Resilience Building

## Challenges

### Framing the Problem

Are we as insane as Einstein proposed: “insanity is doing the same thing over and over again and expecting different results” (Rich)

We know the ingredients, but not the recipe. (Kamal)

Question is more what we can provide for the GAR. We need something beyond the document itself that can drive a strategy to reach out to a broader audience (Juan Pablo)

Over last 15 years there are many examples of good practices... why do we abandon these good ideas? (Kamal)

### Input vs. Outcome Measurement

The central preoccupation for this meeting: 2005 signing of HFA with an objective of reducing disaster losses before 2015. HFA monitor has indicated improvement toward HFA goals, however, losses have continued to accumulate. Governments want 10 more years of HFA status quo in order to make “more progress”. Why this implicit decision and what are the implications? (Andrew, others)

HFA has a clear, measureable goal, that is its Expected Outcome, but the sovereign states have been content with reporting on inputs, not outputs. (Stephen)

If we had achieved HFA, would that have actually led to reduction in risk? Emphasizing the reduction of possible losses in assets as the final outcome of DRR opens the path for returning to the thinking that disasters are worth managing only because they produce a decline or elimination of development’s outcomes. DRR seen as an end in itself can be as distorting as the old paradigm focused exclusively on disaster response and disaster reduction. (Andrew, Lilian).

The central question is as how to to increase the capacity of society to leverage options for the future whilst also avoiding loss related to risk you already have on the ground. There is no answer... how you read the problem defines how you approach it... we just need to find the most efficient way of defining the problem and outcomes for our purposes. (Allan)

How to move from concept to practice via empirical evidence (Allan, Chris, Michelle, Andrew, others)

Since we don’t monitor success of DRR interventions, it becomes hard for us to assess the cost/benefit value of them. (Allan)

### Technocratic vs Humanistic focus

We will never sell this on the risk basis, but more perhaps on a justice basis. An idea of a working title: “Sumado pero no cuadrado”- added up but not squared away (Stephen).

Need to look into behavioral risk. We so focus on indicators that we forget human nature. What can we measure in humans to directly measure fragility in the face of a stressful event? Are we personalizing concepts and depersonalizing people? We lack ownership because there is no one in the concept (Juan Pablo, David)

How do we create a more natural change in education so it flows into culture? (Michelle)

How can the promotion of all this be achieved? How do we move this around from negative to a positive spin, because the focus is still on disaster not on resilience or strengths. We don't hear of Ministries of Illness or of Insecurity so why always Ministries or Commissions for Disaster or Disaster Risk as opposed to Sustainability or Opportunity, for example. (Allan)

What are we trying to protect and enhance through disaster risk reduction? (Marco)

### Specialized vs. Integrative Collaboration

Is a variety of frameworks a minus or a plus? (Marco)

Comparing to Rubik's cube... Need to be aware of impact on other sectors of any given sector's policies and/or changes. Without awareness that the center block cannot be moved, no matter how one rearranges the other blocks, one cannot solve the problem... what are these non-negotiable things? (Gustavo)

Need to understand why studies are not taken up on by governments, not on producing more studies on risk per se. Why don't we learn the lessons? There is enough evidence, but why not change? (Andrew, Ilan, Alvaro, Michelle, Rich, others)

We have frameworks and metrics to record and understand economic and human impacts to some extent but they have largely ignored psychological and emotional impacts which can be long-term and are often hidden; they can also be the most important expression of impact for many people – finance or property can be restored but not peace of mind. This can be thought of as part of a shift from conceiving of DRR's utility as protecting life and economic growth to protecting wellbeing. This is a response to questions over the wisdom of economic growth centred development and the recognition that most risk is extensive and everyday (Mark)

Over 50% of population in CA lives in poverty and under conditions of high vulnerability. Agricultural sector is only now starting to take this into account, especially w/n small farmers without access to irrigation, which are the most vulnerable to climate change. (Pascal)

### Stake-holder vs. Decision-maker Engagement

We need to be asking what stakes the stakeholders are holding?! What are we trying to protect in the end? Need to be able to find minimum conditions/non-

negotiable issues. Within government, executive, legislative, judicial have their own stakes; how can they be integrated? (David, Aromar, Marco)

Consideration of Quasi-public entities is important to the risk dimension. Quasi-public entities and incentive for instability: where are the stakes? (Chris, Franklin)

What could be the leverage points and non negotiables that we can apply pressure to? We have looked before but haven't been able to really find these. (Johara, Stephen)

At least 80% of loss is and will continue to be in private hands; the emphasis on public sector needs to be balanced with the reality of dominance of private sector. (Stephen)

Most decisions seem to be made by avoidance of making decisions. We have to weave in a critique of how international cooperation (via NGOs, UN) may have a negative impact. (Andrew, Rich)

Accountability: There are cases where external agent interventions in legislation or creation of institutional frameworks have to be considered very carefully, taking into account the responsibility involved in such processes. In Bolivia due to El Nino 97-98 and the 1998 earthquake there was a natural evolution for sectors to reflect on problems and generate DRR programs, and there were also important initiatives in terms of environmental issues, that had to be considered, but this evolution process was somehow constrained by the creation of an independent DRR system and the creation of a national system with two heads: planning and defense with no consideration of the required link with the environmental law and the limited inclusiveness of the important role of Heads of Sectors and territorial government levels in DRR. This process was stimulated by outside consultancy services promoted by international agencies (Lilian).

Within the risk reduction community, frequently DRR workers' own survival is important: having a distinct unit/sector for DRR means more job stability and income to use, although it may not be the most effective arrangement. (Sahar)

### Global vs. Local Based

How do we strengthen livelihoods and community based approaches for risk reduction? (Pascal)

Does one group's adaptation cause risks for others? Need more sophisticated models for this so that we take into account downstream effects. (Pascal)

Markets respond well to incentives, but how does it work the other way around? How do you de-incentivize risk creating activities... how do you trace back history to make those responsible pay. We need a stick, not just a carrot. (Pascal)

Local level or local based / supply or demand driven Risk Reduction? Difficulty with international level workers: intrinsic, often well meaning, paternalism makes it difficult to "hand over the reins" to localities and let them "pull" down what they need instead of trying to "push" what we believe. (Chris, Allan)

### Pressure Points

How do we bring about a more dynamic way of implementing DRM? (Kamal)

Problem in that there is not a pressure for political change, improvements. (Pascal)

How do we set up the problem in a way that people read and look into it? How do we transmit the holistic conceptual underpinning without falling into a narrow area of the field, such as risk transfer. (Allan)

Competition as to which country is the most miserable: As a government official put it: “we need the opportunity to be poor a gain”... Give façade of risk reduction but in reality need the disasters from an economic position. (Gustavo). Decrease in international funds for aid to developing countries has increased competition between them in irrational ways.

We can't sell risk reduction. Thus we need to put the incentives in the direction of where there will be buy in in terms of co-benefits (i.e. clean water, health, etc.). (Andrew)

### Disaster Development vs. Resilience Building

Machiavelli: a true leader should be both feared and loved. Governing risk or being governed by risk? Relationship between compliance and resilience. How to avoid having legislation be a political cop out. (Ilan, Chris, Kamal)

Resilience governance has an associated neoliberal implication – it shifts the burden of risk management from the state to individuals and businesses who must experiment and learn, be flexible etc. This need not be the case, one can consider the great advantages of a government supporting agricultural extension workers and urban health promoters to experiment and spread new ideas, but does not seem to be the direction of policy – can the GAR intervene? More generally, yes, resilience as being promoted through policy (though not in academic literature) is inherently conservative and defensive it leads to action that seeks to maintain status quo not necessarily invent new solutions. Some changes coming e.g. Oxfam's policy (Mark)

If one takes resilience seriously as something that will change the way we do development then it has several tensions with existing development imperatives – most important perhaps it is not cost optimizing: resilience needs some degree of flexibility, learning, redundancy, experimentation etc. –all have opportunity costs. It may also require less transparency and accountability as spaces are needed to question established norms, practices and values and this might be best done outside of formal space/structures – some early evidence points this way. (Mark)

Resilience, universal health care and lack of more micro-experiments in the US health care sector. Worst experiments could provide the best potential learning lessons among a wider group. In this mode, resilience would be progressive: all must experiment to improve (just make sure we help those in the failed experiments over the short term). (Chris)

## Concepts

### Framing the Problem

Wrong concepts lead to wrong practice. Have we framed the problem in the incorrect manner? (Andrew, Allan, Michelle, others)

The existing gaps between knowledge, policy and practice that lead to, or leave space for, disasters from natural hazard events, are typically not bad luck but rather constructed by both public and private forces at the local, national and international levels following very parochial goals and objectives. (Stephen)

One typically assumes we need more applied and quantitative DRR, not the conceptual reframing that is the focus here – but we are at an important juncture – resilience/transformation; extensive risk, the anthropocene, economic crisis – these all point to the need to reflect hard on existing priorities and the way development and risk management are structured – and to do this NOW we need to conceptualize development and risk relationships and the ways that assumptions have directed policy and practice. (Mark)

“Good things can be done without concepts”, but in general it is an important approach to tackle first. (Allan)

Problem with bounded discourses and myths. What are the ideas that are allowed to be debated? Who controls the agendas? (Mark, Gustavo, Rich)

### Technocratic vs. Humanistic focus

Who is our most significant audience? Are we personalizing concepts and depersonalizing people? So, risk becomes the major actor, but it is no one. (David)

Need to include natural resources as an actor, or else that actor will participate on its own terms. (Gustavo, David)

Is it human nature to create risk? Human nature to ‘live on the edge’. Do we understand culture? Why so many bad ideas? What is the relationship between culture and regulations? Some people like and thrive on risk; some such activities involve increasing risk for oneself, other such activities involve increasing risk for others. There are differences between risk makers and risk takers, which leads to the question RR of whom, for whom, and by whom. (Ilan, Chris, Franklin, Sahar, Allan)

How do we effectively make RR relevant and less abstract? How do we make DRR sexy? (Ilan)

Risk is sexy, DRR is anti-risky, so anti-sexy: Darwinistically, we are attracted to those that can demonstrate how easily they can survive, in spite of taking great risks. (Chris)

May not need to study disasters, rather just vulnerability (Mark, Ilan)

There used to be a belief that market forces would take care of the planning problems. We have now realized that the model must be changed for the 21<sup>st</sup> century. (Roberto Gallardo)

First, what is DRR? A struggle most fundamentally over values that people can consider, be aware of, that configure their situations. How do we create/change values? (Mark, Alvaro)

If we start by saying that this is endogenous, it is not a driver's conversation, but rather a values conversation (Michelle)

How is one able to leverage well-being and a fulfilling life to comprehend and address their own endogenous risks. (Mark)

People are aware of human rights, but not of risk. Link children's human rights to risk reduction. Intergenerational justice, children and lack of voice in this direction. Use children's rights as a proxy for risk. (Gustavo, Chris, Aromar)

### Specialized vs. Integrative Collaboration

Geography of causality vs. geography of impact (Pascal, David)

Drop the D in DRR: the D keeps us locked into intensive disaster risk; dropping it allows us to move into comprehensive risk reduction which carries more natural buy-in due to increased relevance. (Chris, Marco)

DRR/CCA: D and CC had already been dropped from Johara's job title, so now just generic risk reduction & adaptation, which enables her to tackle problems in a more holistic and integral manner. (Johara)

Disaster databases will always place the focus on disasters, not to the variables that turn events into disasters; what we need is event databases with loss (or non-loss) data. Need for a "top 10 disasters averted" list. (Ilan, Chris)

### Disaster Development vs Resilience Building

"Build back better" vs. "Build back better livelihoods" (Franklin)

The final outcome of HFA: substantial reduction in losses impels a question: is a reduction in probability of losses the end goal or should we be looking to build resilient systems? How do we manage risk if the possible assets that we want to preserve never existed (in the case of chronic risk) are destroyed (as in the case of a crisis or disaster scenario) or still don't exist (In the case of future risk)? (Lilian)

CCA tends to privilege hazard as the only driver of risk, while sidelining vulnerability. (Pascal)

Instead of trying to get development actors to integrate DRR maybe we should integrate development into DRR. Ask: "What cannot be lost, what cannot be interrupted" (David)

How is water, garbage, security, business continuity handled? These are the on-the-ground risk reduction practices, under a label of guaranteeing basic services. Risk reduction as a co-benefit. (Andrew)

### Stake-holder vs. Decision-Maker Engagement

A range of complex priorities lie in front of decision makers, and pressing issues, so how do you get them to make long term decisions? (Michelle)

Ministers are protecting against government risk, not the national risk, but first and foremost financial risk to the state. Citizenry imagines that they have coverage, but disasters reveal the gap with reality. (Andrew, Stephen)

Propose that decision makers don't actually exist as a category... Andrew never has actually met one. (Alonso, Andrew)

Where is the Chief Risk Officer in government institutions? Literature and standards on how risk management should be handled at corporate level... much to be learned by states. (Franklin, Chris, Andrew)

This is increasingly visible in societies distinguished by their evolving participatory democracies and free market economies. Whether or not these two are the most desirable, enduring or endearing forms of government and economic organization, they are the contexts of most of what gives shape to knowledge, policy and practice regarding development, disasters and risk around the globe. (Steve)

Rio 1992: "think globally, act locally". Back to the idea of a civil society GAR, and making governments accountable for risks. (Pascal)

### Global vs. Local Based

Three things that have changed over past 2 decades: 1. networked society & interconnectedness, this is manifest in teleconnected vulnerability; new and so far undefined responsibilities for risk e.g. climate change (consumption in one place leads to risk in another place or time); but also through new economic practices that magnify and transfer risk (e.g. global commodity markets, just-in-time production...) and information technology opening new spaces for governance, or perhaps information overload; 2. The arrival of the anthropocene (the idea that we are in a new 'geological era', one dominated by 'man' – that we are fast passing ecological limits of survival) – we are hitting the limits of sustainability – this has huge implications for the kind of development that we can consider and how far more growth can be considered a legitimate way out of risk e.g. grow now to gain resource to cope with externalities that might arrive in the future; 3. Risk as a tool of late modern governance. This is identified in Europe, North America – is it in the BRICS too? The idea that in the past hazard (crime, war, natural etc.) was perceived by citizens and the state as a primary responsibility for the state and that protection should be for all; now under a risk policy frame government make judgments based on probability and move resources accordingly – the result is that people are left exposed, - the concern is that the shift in government policy/philosophy has not been matched by awareness amongst the public – so citizens are not taking more responsibility. This can lead to more risk and also contribute to reduced legitimacy in government, science etc. Economic crisis & abdication of responsibility... no more security provided by governments, rather

risk management... probabilistic assumption that they have some security, but one may be an outlier (and many, if not most, may be outliers). (Mark)

Local, national, regional, global buckets are typically used as a territorial approach yet few actors really work at one level only. And sectorial framework brings in multiple authorities at each of the local, national, etc. approaches (Marco, Juan Pablo)

### Input vs. Outcome Measurement

If we have indicators on outputs this could take away from importance of process... maybe we need more indicators on process as well. (Johara)

HFA has a clear, measureable goal, that is its Expected Outcome, but the sovereign states have been content with reporting on inputs (reported under Strategic Goals and Priorities for Action), not outputs (lessen loss of life and economic loss, fewer impacted population and less damage to the structure and function of ecosystems). (Stephen)

## **Obstacles**

### Framing the Problem

Disconnect b/n what we think we should be doing and what that impact has on risk (Andrew)

DRR community is currently marginal in the discussion of growth and development... how do we integrate ourselves into the process? (Aromar)

What combination or balance of individualism and collectivism leads to each obstacle we face? (Ilan)

### Technocratic vs. Humanism

The price of one B-2 bomber could retrofit every vulnerable school in LAC (calculation done in 2000)... it's not about money, rather it's about who controls it and where they want it to go. (Stephen)

How do you deal with existing, deteriorating and growing building and public infrastructure stock? (Juan Pablo)

Language of risk is alienating... doesn't create empathy, sympathy, action. The discussion is too abstract. GAR needs to have an audience of every-day people. (Michelle)

Much of discussion is based around fear, which is itself a powerful tool. But we are trying to use fear for disasters that are not in the here and now. (Aromar)

Focus is still on the formal dimension, yet most of the accumulated risk is in the informal dimension. In fact, much of the formal is becoming informal which adds to the difficulty of the division. (Juan Pablo, Andrew)

Need stronger emphasis on weight that corruption has, especially in consideration of relationship b/n informal and formal sector. Corruption in state activities are common causes of disaster losses, yet seldom brought to light. (Alonso, Franklin)

### Specialized vs Integrative Collaboration

Difficulties in segregating concepts... we need to be handling this all from a much more holistic, integral perspective (Allan)

Hunger risk (when living in a safe place means being far away from an income source) vs. landslide risk... it all comes back to issue of chronic risk. We are so afraid of the complexity that we try to compartmentalize it all. So, information ends up fragmented. Disaster risk is an extension of Chronic risk as Hewitt pointed out many years ago. (Lilian)

DRR needs to be conceived of as a program rather than a series of projects or products (Lilian, others)

Our world views are generally too limited to understand causal relationships (Johara, Chris)

There are many rational decisions underlying policies, but often there is a selective use of evidence. (Alonso)

Existing information about hazards and risk is not utilized to inform the public and governments. For example, the multi-hazard risk models are good, but the results and interpretations are too complex for most of the end users. There is a need for communicating information that is easy to digest for general public and non-technical government people (Sahar)

### Disaster Development vs Resilience Building

Confusions still exist conceptually, for example the use of “disaster impacts” referring to loss and damage when that is in fact the disaster not its impact or the continued use of ‘natural disasters’ as a descriptor. We are always undermining our foundations by returning to a focus on disaster as opposed to latent risk, to disaster cycles as opposed to risk continuums. (Allan)

Disasters as endogenous to development is not even there in the concept. (Andrew, Chris)

Development paradigm is growth-centric, but not very integrated in terms of taking into account social implications of development. (Mark, Michelle, Chris, Allan, others)

Too much emphasis on reducing losses leads to DRR functioning as a band aid on development (Lilian)

Not internalizing risks in terms of direct & indirect effects, and its relationship with the spoiling of the commons. Lack of acceptance of the commons; if you parse enough words you can continue the debate without getting to the underlying problem. (Pascal, Stephen)

Extractive industries are major drivers of growth, and elite capture of these gains in exchange for incredible number of marginalized workers that receive the risk. (Kamal)

Quintana Roo – Yucatan, Mexico: Regularly hit but quickly rebuilt: it is resilient development but it is the antithesis of sustainable development. A model that is protected by DRR, but hugely contributes to climate change. (Mark, Pascal)

### Stake-holder vs. Decision-maker Engagement

There has been a significant erosion in regulatory systems, and more needs to be done to define responsibilities, rights, expectations, governance processes, including those of informal nature (Franklin, Marco)

How to extend the horizon of decision making? (Michelle, Alvaro)

Passing legislation is a cop-out; it is mainly symbolic. We have not pursued this compliance side... what are the motivations/blockages? There is a need for a balance between enforcement, compliance and accountability in DRR, which involves the public sector, private sector, and civil society (Rich, Juan Pablo)

No major motivation for reducing risk... there is always something more important to be dealt with. Disaster Risk is about #8 priority. Moreover, most often those who make the decisions, control the decision making on physical, economic and financial risk – particularly of the poor – are not held responsible nor accountable either as individuals or entities be they public or private. But, we still have to find ways to resolve these problems. (Alonso, Stephen)

Apparent inaction or purposeful inaction as drivers of status-quo. How do we make people act, and act in the way we would like them to act? (Michelle, Stephen)

Climate change & poverty- two way street- if it is argued that adaptation is made difficult due to poverty, then developed countries can almost cynically say they are not responsible and throw the ball back in the court of the developing countries forgetting the greenhouse gas context. (Allan)

Bogota: In trying to improve quality of life for recyclers, the mayor touched the interests of powerful business men and mafias, which was a very big problem. Because what is in the middle are all of the economic interests whose business is to construct risk in the face of a government that wants to change things. This applies at both the formal and informal levels in many ways (Gustavo)

The key aspects of the type and extent of increasing vulnerability of the built environment present in many countries after almost 50 years of international development and disaster management assistance are the following:

- Increasing damage and destruction of social and economic infrastructure including lifelines,
- Relatively few changes to zoning laws and building codes to increase the resilience,
- Fierce opposition from the private segment of all sectors to increased requirements for resilience,

- Continued encroachment of the built environment and ag-industry operations in known hazard-prone areas, and
- Failures to prepare, enact, regulate and enforce land use planning and environmental management guidance, master plans, zoning regulations and building codes. (Steve)

### Global vs. Local Based

Need to focus much more on the implementation phase; due to large amount of variety, no global solutions could possibly work at the local level... all needs to be developed from the ground up (David)

International bankruptcy, as well as individual bankruptcy and relationship to risk and sustainability at the local level: unsustainable debt payments make RR impossible. (Chris)

### Input vs. Outcome Measurement

Broad challenge in 'cult' approach to development in excluding disaster risk except for that which is readily apparent. It is no accident that the HFA only measures inputs, not outcomes. See above (Stephen)

Need to reform the ISDR monitoring system for HFA or the next framework. The whole system needs to be re-thought, it is not actually measuring progress or lack of progress and it is also not asking the important questions to the most relevant actors. (Lilian, Alonso)

## **Solutions**

### Framing the Solution

People don't think about "risk", they just get on with doing (Allan, Gustavo)

Often we hear of the word myth as something negative, but myths has always been valuable for humans in understanding their world. (Gustavo)

Solution may have more to do with social demand, private sector, informal sector, social media, role of the state. (Andrew)

How do we visualize and make simpler many of these more complex things. The big gains come not from incremental improvements in modeling but from engaging effectively with those at risk and managing risk at the local level. This is based on agreement that extensive risk is important, risk that is not captured by large modeling exercises, so we have to empower local actors. (Mark)

2015 is an important year as many international processes will converge (HFA, MDGs, SDGs, UNFCCC COP, etc.) . So this is a great time to rattle the cage and let the beast out. (Pascal)

Sovereign states, multilateral development banks (MDBs), NGOs and the international development community (IDC) should collaborate and shift paradigms to:

- Use all development actions to recognize, review and reduce risk;
- Separate EM policy and operations from DRM while establishing an EM presence in every sector;
- Fold DRM and CCA into development planning and lending practices;
- Promote hazard, vulnerability and risk information as a free, public good; and
- Insist on accountability and responsibility to natural hazard risk all along the development continuum. (Steve)

### GAR 15

GAR 15 3 parts: 1. Global risk model, 2. From risk to macroeconomics of risk. 3. Moving forward: consensus document from this meeting. Needs to be link to HFA II & SDGs. Make a virtual Rubiks cube: provide ingredients, seasoning, levers, pressure points, but not recipe. (Andrew)

GAR 15 can be used to capitalize on previous GARs and continue building the story. Also, instead of a competing advocacy model (DRR is more important than...), let's describe DRR as what makes you achieve what you want, and thus build upon and integrate with existing stories. (Marco)

First 2 sections of GAR are the foundation, these two need to be well linked to the 3<sup>rd</sup> section we've been discussing in this meeting. For example: some results of risk model be presented in a very simple to understand format to be used by general public; few cases of risk assessment and economic impact on a specific sector (Water and sanitation of a city, or transport system of a province); (Sahar)

There cannot be one size fits all recipe, and shouldn't expect GAR to play that role. Maybe we should have a series of 'think pieces' that should go into the recipe, without defining how the recipe should go together as this will vary from place to place. (Andrew)

Need to have a clear link in next GAR on how it builds on previous GAR. Importance of regaining human dimension over the physical, engineering and economic focus. (Juan Pablo)

### Technocratic vs. Humanism

3 areas that define the current intellectual/political moment are promising for providing new space and leverage for risk reduction as part of a wider revision of development: 1. Through existing evidence and practice find transformative systems, 2. Learning paradigm is central, 3. Rethinking citizenship through risk lens. (Mark)

Do we need to factor institutions (the mal functioning part) into part of the risk equation? (Marco)

How can we use marketing tools to promote a world view change? Development of communication & strategies at various levels of decision makers (Sahar, Johara, Chris)

Informal solutions should receive more focus than formal solutions as informality is growing faster and bigger than formality (Juan Pablo)

Women in households are best risk managers, but we don't upscale their knowledge (Gustavo)

Importance of having project staff come from the community itself or surrounding communities for DRR effectiveness and potential to lead to changes in development patterns as demonstrated through outputs of two similar Oxfam projects in Guyana and Dominican Republic (Mark)

We love the professional-technical stuff, but it is not sellable. If we can reframe this the whole issue, the readership changes. If you want to make this sellable you want to get attention... shift to political risk and political opportunity. (Rich)

We need to redouble our efforts to educate people on what is to most still a novel paradigm for looking at their world and their risk. (Chris)

Regarding human nature, in order to converge on shared human values do we continue to push against the trend of neoliberalism and consumerism or do we go with it? (Ilan)

Use of values to identify drivers. Important to bring people back in, not as 'civil society' but rather everyone's business. This change is due to that we are willing to ask different questions. (Michelle)

Information, communication and knowledge are not actually integrated into decision making processes. This is because knowledge and management of risk are approached separately and those three are precisely new factors that can now be powerful tools for change now more than ever. (Lilian).

### Specialized vs Integrative Collaboration

Example of Peru's legal separation of civil protection and DRR: At least concepts have been made clearer and this has led to proper division of roles, even though they still haven't figured out how to do the DRR side. (Allan)

Research, knowledge, and practice often go in different directions... these need to be reunited. (Carlos Carranzo)

Sustainability vs. Effectiveness matrix: look for effective and sustainable solutions. (Alvaro)

All involved disciplines and sectors can and must develop data bases - hazard, vulnerability, risk and losses - to make manifest risk DRM in the context of development. Authorities whether in the public or private sector who own and/or operate vulnerable social and economic infrastructure of any sector at any scale must bear the responsibility and accountability of dealing with such risk. (Steve)

### Disaster Development vs Resilience Building

Debate of development models is occurring throughout the world due to the many sources of actualized risk, both of natural and social origin... how do we leverage this? (Yoriko Yasukawa)

Need to redefine development goals for HFA, SDGs (Aromar)

Need to transform development to get to resilience, and this needs to be evidence based, so far the limited evidence we have of transformation comes mostly from outside of DRR field, though there must be many examples of projects that have led to local social systems (values e.g. gender relations; economic, e.g. livelihoods or technology) being abandoned and replaced. (Mark)

Many things that can be done don't increase cost of development, which is a common fear. We need to better communicate this message so DRR can be seen as actually contributing to more effective development. (Pascal)

Need to demonstrate increased sustainability that can be derived from improved integration of DRR into development (Pascal)

Maybe good governance is simply the output of reduced risk for all commensurate to their underlying resilience. One could argue that governance should be aligned to only play the role of risk reduction/resilience building. It is especially important to consider the effect of moral hazard through governance that leads to risk accumulation. (Franklin, Chris)

Emergency and response actually bring some of the best opportunity to address risk sources, rather than waiting until post-response for DRR actors to come into play. By conceptually separating DRR and emergency response, we force response actions to be extremely pragmatic and not sufficiently forward-thinking. This doesn't mean that preparedness and response processes should quit having the sense of urgency and pragmatism needed to save lives without delay; nor should risk analysis or risk prospection fall into a reductionism and over simplification. It doesn't mean either that the actors trained to respond to emergencies should explicitly build long term resilience resilience, it is more a matter of approach rather than putting everybody (people and organizations/institutions) to do the same. Factors such as timeframes; differentiated capacities: extreme vested conditions and institutional and political constrains that an emergency situation entails, must be carefully analyzed in its particularities, but it is worthwhile to study the relationship and the trends of the relationship of response efforts and resilience building from a different perspective than the disaggregated vision that currently prevails. (Lilian)

Focus reconstruction on building educational capacities so that those affected by the event are the ones that actually do the reconstruction. Injecting funds to educators provides similar short term stimulus to the economy as do direct reconstruction activities except that these can achieve much higher buy-in from local groups. (Chris)

### Stake-holder vs. Decision-maker Engagement

Need to expand topic beyond experts to general practitioners. (Carlos Carranzo)

Need to study governance mechanisms in what are considered informal sectors for potential answers to DRR governance mechanisms in both: formal and informal settlements (Juan Pablo)

Do we need an authority to make things happen? How would it shape up? Is it an institutional actor or something else? Question of decentralization (Michelle, Marco)

No countries move without considering Article 4 assessment of its economic health to forestall future problems: can DRR move into a similar space in terms of assessment of risk profile and related necessary actions (Michelle)

Many decision makers rely on authorities to inform them... could be easier to approach these people directly. (David)

Need mechanisms where businesses, utilities and local governments can work together for mutual interest (Andrew)

Governance by society and culture is often overlooked (Stephen)

Earthquake risk and public trust based on a public opinion survey in a top-rung peer-reviewed journal as example of the type of evidence that may better drive decision makers (Rich)

DRR and Law- many of these issues help shape and bring conversation forward, e.g.: UN codification of international law on the topic of protecting people in disaster. (Marco)

Societies, particularly those in the throes of dealing with being a sovereign state, need to know much more about natural hazard risk and their society over the past six decades in terms of time and space in relation to physical character, built environment-related economic and social relations, and culture. Those nation states in the throes of a representative democracy, whose society is governed by laws that protect not only the rights of individual citizens but also the broader population, must constantly identify and discuss what to do, especially for the poor. Those countries in the throes of a free market economy whose presence and power strives towards maximizing gains with minimal expenditure of capital must constantly identify and discuss who will pay, how, when and why for the losses that are the result of economic development. (Steve)

### Global vs. Local Based

Need to develop ability for communities to develop DRR for their specific needs and culture. Communities know when stupid stuff is being done... stop thinking of government as the only solution: maybe we need social enforcement of existing laws. Shift paradigm from top down to bottom up (David, Chris, Rich, Allan)

How can we have a civil society arm of the GAR to inform/build a global action network that can get down to the grassroots level. (Pascal)

Change doesn't come from the top-down. Importance is in engaging local groups. How do we get endogenous experiential learning. (Mark, Allan, others)

The theory and practice of development should lay completely aside the paradigms of the “disaster cycle” and the “window of opportunity following a disaster,” and adhere to continual risk reduction through development with the poor as the primary beneficiary, which is essential for the attainment of the MDGs. While societies speak truth to power, risk reduction actions for the poor must speak justice to truth. The polemic of DRM or CCA as the priority in development-based risk management should be laid aside in favor of economic and social development-led risk reduction to all manner of natural hazard events. The work of society through government and other societal mechanisms (such as private sector risk assessment and risk transfer mechanisms) is to make visible risk and to charge and hold accountable the owners and operators of economic and social infrastructure, whether public or private, for risk reduction to natural hazard events. (Steve)

#### Input vs. Outcome Measurement

Need for a database of non-loss events, or rather, a database of events and associated losses/non-losses if we want to move beyond disasters toward that which we really need to be measuring. (Ilan, Chris)

Need to make a more concerted effort on plugging the effects of disasters on a macro level (Aromar)

Need to increase focus on macro-economic risk to better answer question of latent risk and drive importance of building economic buffers. (Aromar)

What we need is “dashboards for decision makers” and “pitchforks for people”: arm decision makers with the tools to make the right decisions, and arm the people with the tools to sack their decision makers if they fail to adequately govern risk. (Chris)

Why are we being shy about decomposing the rights issue so individuals can demand protections for both this and future generations (Johara)

Leveraging certifications according to risk. Pricing risk into assets. Clarify ownership. Establishing the chain of liability is extremely important. (Andrew, Aromar)

Extend HFA to outputs or align HFA to SDGs. Need to link outcomes to money. (Aromar)

## ANNEX B: Meeting Notes

### Meeting Agenda

<b>Thursday, April 18, 2013</b>		
<b>Time</b>	<b>Topic</b>	<b>Presenters</b>
9:00 - 9:30	Introductions & Introductory remarks	Adrian Bonilla Soria, Andrew Maskrey
9:30 - 10:30	Purpose of meeting & basic introduction to key aspects and meeting method	Andrew Maskrey, Allan Lavell.
10:30 - 10.50	Coffee	
10.50 - 12:30	5 minutes per person to lay out most salient barrier and way forward	All contributors
12:30 - 2:00	Lunch	
2:00 - 3.45	Thematic session #1: Conceptual and notional underpinnings and the way the disaster risk problematic has been constructed and understood.	Andrew Maskrey Allan Lavell
3.45- 5:30	Open time to return to hotel, check email, etc. and return to FLACSO	
5:30 - 8:30	Public event and cocktail at FLACSO	
<b>Friday, April 19, 2013</b>		
<b>Time</b>	<b>Topic</b>	<b>Presenters</b>
9:00 - 10:30	Thematic session #2: Risk Governance Issues: decision structures, institutions, stakeholders, decentralization, participation etc.	Marco Toscano Rivalta
10:30 - 10.50	Coffee	
10.50 - 12:30	Thematic session #3: Political, social, economic incentives for risk reduction	Ilan Kelman
12:30 - 2:00	Lunch	
2:00 - 3:30	Looking at strategies and instruments from a holistic , concept based perspective	Incorporated in previous discussions
3:30 - 3.50	Coffee	

3.50 - 6:00	Global Issues, Synthesis & wrap-up	
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## Overview

### *Introductions*

Allan Lavell – We will take a moment to go around the group and introduce ourselves.

Mark Pelling – Professor of Geography, King’s College London. A little over a decade in DRR and CCA. Is interested in the opportunities opened by disasters, their antecedents in the production of vulnerability and hazard, and impacts, for revealing and acting on underlying development challenges. Currently working on heat wave risk and vulnerability in Europe and on conceptualizing resilience and transformation in DRR and CCA. Served the IPCC and UN, NGOs, UK government etc.

Juan Pablo Sarmiento – Research Professor at FIU, Florida, USA. MD, PPH;. DRR focus, specifically how to better deal with the built environment. Has found interesting evidence coming from governance mechanisms in what are considered informal sectors. Interested in bio indicators as proxies for disaster risk.

Franklin McDonald – Retired, University of West Indies, National Environment and Planning Agency, Office of Disaster Preparedness, Jamaica. Visiting Scholar at York University in Toronto, Canada. Interested in how we convert lessons into practice, and use of forensics for this. We tend to be good at the tactical level, but not so much at strategic/macro level. There has been a significant erosion in regulatory systems. More attention needs to be focused on how we communicate, tools for DRR all levels, including the private sector.

Lilian Reyes – Architect by training. Came to the topic from a practical side working in the reconstruction process of 1998 in Bolivia. Worked in PREDECAN for 4 years and had a good chance to theorize and better understand concepts and analyze significant local level DRR projects in the Andean Region. Too much emphasis on reducing losses leads to mislead the final outcome of resilience building and makes DRR function only as a band aid on development.

Sahar Safaie – Earthquake engineer, worked with RMS cat modeling firm in California & a few years in World Bank. Main interest in communication & strategies at various levels of decision makers.

Chris Lavell – Extensive experience with the linkage between on-the-ground work and conceptual development in several fields, from residential construction to client/server software architecture, on through to financial risk management and its practical applications in DRR. In essence, we need to focus on creating a better transmission mechanism b/n theory and practice in order to advance the penetration of the paradigm shift from “dis-asters” (bad, exogenous stars) to “cata-strophes” (endogenous, human created crises).

Allan Lavell – Associate Researcher at FLACSO. One of the founding members of La Red and dedicated to the conceptual development that led from its early work as a think-tank. Interested in how to move from concept to practice via empirical

evidence. Lower Lempa Valley project served as a catharsis for the validity of conceptual underpinnings that La Red developed... how do we extend these concepts to a wider range of use by decision makers and local communities?

Aromar Revi - 25 years in risk reduction in south Asia, including response & mitigation programs. Has worked on climate change, cities' adaptation w/ Mark Pelling. 30 years' experience in development. Need to redefine development goals for HFA, SDGs. Interested in integrating DRR, CC, development at national and international levels.

Andrew Maskrey – 31 years in DRR since first project assessing seismic risk in Lima. Advice given: Need to study why studies are not taken up on by governments, not on producing more studies on risk per se. Was doing Housing and Urban development in Peru and met Allan at meeting in Los Angeles IN 1991 outside smoking. If WHO had been more successful then the two of them would never have met.

Johara Bellali – Engineer & manager by trade. Currently risk reduction manager for Save the Children. Main focus on slow-onset risk. Coming from a climate change lens: sustainable development is the end aim. Need to have her feet on the ground as she knows she trends toward conceptualization. Interested in marketing tools to promote a world view change.

Ilan Kelman – Two main interests- Disaster diplomacy: how does it create or reduce conflict. Island states: how do they/ can they deal with exposure, vulnerability. Interested in history of how much we have produced and then forgotten: is compiling non-electronic sources of research work and putting them on line. 1984 OCHA Rio meeting outputs: sadly, we haven't moved on from there yet. "Why don't we learn the lessons?"

Pascal Girot – Background in Geography, 15 years at professor at UCR. Environmental policy focus, currently with CARE Denmark. Same as others, why haven't we moved forward? Focus on adaptation approaches and vulnerability assessments. De-linkage of what is going on at community level vs. at the multi-lateral level. Market is going in one direction: growth, but on unsustainable direction. Eg: 750,000/yr deaths in China due to respiratory disorders, but still not affecting "growth". How do we bring things back together? Sustainable development goals approach doesn't seem to be going anywhere. How do we strengthen livelihoods and community based approaches at risk reduction?

Marco Toscano Rivalta - ISDR corporate lawyer and head of SRSO office. Moved into humanitarian, human rights work from corporate work. How effective is management of risk considering all of the competing interests and multifaceted manners. Interest in issues related with (risk) governance. Engaged in processes related to normative developments. Interest in how legal questions may be of relevance and impact on the development of HFA2.

Alvaro Montero – CR Red Cross since 1976. Has worked for local, international agencies and now COO for CNE in CR. He has a Masters in Public Administration from the University of Costa Rica. Now completing doctoral dissertation in public policy. Same questions as many others in the room: why so little change so far?

Michelle Gyles- McDonnough – lawyer, and proud of it, which shapes much of her perspective. International trade lawyer. About understanding how the world is

organized to enable the wellbeing of people. Connection b/n trade and development. Lens of resilience: resilient nations that enable people to have fulfilling lives. All sources of risk must be considered (not just disaster risk): cannot exclude disaster or CC risk in looking at overall picture. Cannot seem to match evidence and lessons with change in concept and behavior. There is enough evidence, but why not the change? Role of civil society, individuals, accountability systems, and how these can be used for change. Need better integration of DRR & development.

David Smith – approach to DRR: people-centered focus & through development. Diversity, practice, needs, ownership, change focus. CEPREDENAC president & projects director over 15 years. Currently director of school of psychology and director of DRM program at National University Costa Rica (UNA?) Last 4 years: Sectorial & territorial focus on DRR, primarily working with stakeholders. We need to be asking what stakes the stakeholders are holding?

Rich Olson – Director of Extreme Event Research, Florida International University, shares same frustration with lack of progress. When event occurs, the game is over: it is just the actualization of risk already accumulated. In late 90's after Mitch and George moved toward a DRR paradigm. Have been dominated too long by response people, and had been missing the whole creation of the risk. How do we make key decision makers do something?

Alonso Brenes – Political geographer. Researcher at FLACSO and consultant to IDB, World Bank, IUCN etc. Key interest: political process that lies behind the instruments and tools that we are producing in DRR.

Kamal Kishore – Architecture start, 20 years in DRR in India, last 10 years in UNDP. Interest: how do we move beyond dogmatic application of Hyogo framework to actually making a difference on the ground? Pakistan can tick off all of the HFA boxes, although there is in fact no tangible reduction in flood risk. Startled with how fast bad policies in DRR spread. *We know the ingredients, but not the recipe.* Just touching the edges, much less getting to the core. CCA & DRR: the rhetoric is there, action is starting to happen, but there is a danger in lumping all of DRR with CCA. For example, in an urbanizing world there are a number of cities that are exposed to earthquakes. As Franklin said, the political imperative always trumps the objective reality. This means that in the current global discourse, risks associated with geo-physical hazards tend to get

Gustavo Wilchez-Chaux Colombian lawyer member of La Red. Consultant in environmental management, communication; risk management, similar to most other participants.

Steve Bender – Architect and planner served as a division chief and headed the Natural Hazards Project of the Organization of American States, Department of Sustainable Development (and its predecessors). With specialization in natural hazard risk management, environmental management, and social and economic infrastructure development, he has also served in various teaching capacities in the Americas and as a consultant to international organizations in the Africa, Asia, Caribbean, and Latin America.

## ***Purpose, Concepts, Issues, Notions***

Andrew – 3 points: Background on GAR 2015. What is the purpose of meeting? How did we come to be invited?

GAR 2015: Global picture of risk, approaches to reduction, topic or theme (2009 GAR: poverty & poverty reduction; 2011 GAR: links to public investment; 2013 GAR: private sector).

2015 GAR now starting. Advisory board met two months ago in Geneva. GAR 2015 needs to provide:

1. Retrospective on what has happened in last 10 years within HFA.
2. Probabilistic risk model complete with all types of primary events
3. What does this really mean in \$\$ terms.
4. What should be the 2015 theme? What is the future?

Not our role to develop HFA II, but to help inform process. Have or have we not achieved HFA? Furthermore, if we had achieved HFA, would that have actually led to reduction in risk? Every time more boxes are ticked, so governments are implying that things are getting better... but loss data goes in the other direction. Obvious disconnect b/n what we think we should be doing and what that impact has on risk. So, ask these questions in terms of what is missing in HFA/DRR that should be addressed if we are to get some handle on reducing risk. Objective is to reduce risk, not implement HFA.

What do we need to do to address these themes? More workshops? More research? More \_\_\_? Allan's conclusion that if many development agencies and organizations were doing what they should do well they would not need a DRR unit as such. So, why are we doing DRR? And why is this completely disconnected with what is going on in practice? Disasters are only indicators of bad development, so why focus on indicators instead of development itself? So, this meeting is meant to be lightly structured to brainstorm on how we should start to move in the right direction under the assumption that wrong concepts lead to wrong practice.

Invitees: balance of GAR advisory board, 1984 OCHA Rio participants, old/young, and regional balance. Confirmation of key blocks we need to deal with and discussion on how we as a team take that forward.

David Smith: Part of the problem is with DRR members considering their practice as an entity in itself, rather than focusing on needs of decision makers and better providing them with tools that they are in demand of.

Andrew: outcome of this meeting is to have early, preliminary papers to leverage for platform meeting in May.

**[COFFEE BREAK]**

## ***Five-Minute Overviews from Participants***

***(see each participants two page written piece requested prior to the meeting for greater details)***

Introduction: Allan Lavell - What are the fundamental ideas brought up in the 2-pagers? That is what we want you to highlight now in five minutes. Our two day discussion will be structured around the following themes identified in the two pagers written prior to the meeting by all. Thematic session #1: Conceptual and notional underpinnings and the way the disaster risk problematic has been constructed and understood. How to structure unstructured, open-ended discussion. Difficulties in segregating concepts... we need to be handling this all from a much more holistic, integral perspective. Conceptual: Corrective, prospective DRR modes; extensive/intensive risk, etc. Thematic Section 2. Governance, institutionalization, legality, affectivity. 3. Frustration and how you get this on the ground... how you "dress it up" for public acceptance. 4. Instruments of intervention.

Ilan Kelman - Is it human nature to create risk? Biological imperative to breed, but socially we have overcome that... example of women's rights & information transparency were the solution. People want to learn from experience. We as humans like to make mistakes to then learn from them.

Pascal Girot – how do we handle current risks? Principal problem: not internalizing risks in terms of direct & indirect effects. Use of social commons as a place to leave externalities from being internalized. If we can't handle the impacts on the environment, then next generation will have an even harder time. Transfer of costs to different parts of society and to future generations. Pollution being transferred downstream. Decisions are decoupled from where impact is occurring. Geography of causality vs. geography of impact. How to link risk creation and risk bearers? Need new mechanisms to address this.

Marco– increasing complexity of collective decision making and potential paradigm changes needed in order to ensure inclusiveness and representation of needs, assumption of responsibilities and coordinated action across stakeholders. Need for an 'authority'? What are the characteristics and type of such authority? How is potential of stakeholders leveraged by this authority? Role of normative instruments. Important dichotomy b/n local and national. Is variety of frameworks a minus or a plus?

Alvaro– Lack of integrated vision for quality in infrastructure, housing, etc. Short-term decision making nature of the issue.

Michelle – Need approaches for dealing with the political space. How to extend the horizon of decision making? What drives the decision makers that help get policy and enforcement in place? How do we frame the question for them so that there is uptake? How to get benefits of common law systems within legislative systems. Things are going nowhere because we are asking the wrong questions. How do we get from the periphery to the center of the problem? No countries move without considering Article 4 assessment of their economic health to forestall future problems: can DRR move into a similar space.

David– Need to focus much more on the implementation phase. Example: municipalities for which emergency flooding plan was created, then local flood commissions (took only a few months)... yet, the highlight is that almost a year afterward the community integrated a cooperative for water catchment. This was a fully organic process. Includes multi-municipality interaction, water catchment, forestry issues and most importantly to look at water as a resource not a hazard. These leaders are not experts but developed a mechanism that seems to work for them. Need to develop ability for communities to develop DRR for their specific needs and culture. Due to large amount of variety, no global solutions could possibly work... all needs to be developed from the ground up. [CL: how do we provide services to local communities so they can take what they want on a pull basis].

Rich - Tying a few threads together. Don't need more legislation, just more compliance with existing laws and regulations. Passing legislation is a cop-out; it is mainly symbolic. PM of New Zealand had to make a public apology re TV tower that caused the most fatalities in Christchurch due to failure by junior engineer that was not properly supervised, nor were his errors caught more upstream... if this happens in New Zealand, a seismic capital of the world, then what about the rest of the world? We are as insane as Einstein proposed: "the definition of insanity is doing the same thing over and over again and expecting different results."? Communities know when stupid stuff is being done... stop thinking of government as solution: maybe we need social enforcement of existing laws. Shift paradigm from top down to bottom up... what do we have to lose?

Alonso – Impunity of sectors and society in creating risk. No major motivation for reducing risk... there is always something more important to be dealt with. How do we focus on sectors and issues that are on mind of decision makers and try to address from this angle?

Kamal – Growth models of most countries are completely crazy, not sustainable. DRR isn't even on the table for those decisions. Extractive industries are major drivers of growth, and elite capture of these gains in exchange for incredible number of marginalized workers that receive the risk. Encyclopedia of bad DRR practices would be much bigger than the encyclopedia of good DRR practices. More bad than good legislation, and that is without taking into account the cop-out that such legislation is versus enforcement of existing laws.

Mark The interaction of DRR with CC has three danger points. . 1. Extreme events (tail end and catastrophic both) are a convenient way of illustrating CC for the CC community and have become a proxy for CC, but within DRR and as far as CCA is a sub-set of DRR, this is leading to focus on extreme events not the many small extensive risk events that the GAR argues are important: so we have a distortion in academic and policy investment. . 2. Quantitative, positivist science in CC – very intellectually rich due to number of people and \$\$, but still limited to that privileged, northern view. We understand impacts, but not at the personal/psychological issues. E.g: biggest problem in floods in England has been impersonal treatment by insurance companies. 3. Critique of resilience – SREX critique was a huge plus to topic. Need to transform development to get to resilience, and this needs to be evidence based, which comes mostly from outside

of DRR field. But, resilience is mainly conservative in conception, and seeks to maintain status quo not invent new solutions.

Juan Pablo Sarmiento – What is the GAR about? Why are we here? Question is more what we can provide for the GAR? Something that can drive a strategy to reach out to a broader audience. We need to take advantage of new technology and use webinars and other tools to expand the community that is participating in this discussion, to market DRR, and more specifically to the GAR in order to expand demand for knowledge in this. Informal settlements are teaching how to survive on a daily basis, to solve one's own problems... maybe informal solutions should receive more focus than formal solutions as informality is growing faster and bigger than formality. Less in the mode of developing new cities, rather having to deal with existing places that are much harder to improve on. How do you deal with existing, deteriorating building stock and public infrastructure? Less impact in more vulnerable societies. Small events will continue to grow. Global and macro trends are not like the past, but will most definitely be worse.

Franklin – Evidence suggests that there is an uneven distribution of increased capacity. Key players are either under used or over used. Human nature to 'live on the edge'. What can be done to improve systems in next iteration of HFA? Good and best practice needs to be amplified, worst practices need to be deemphasized. Need more people that understand human nature, and need to look at this objectively. Need to tap into existing knowledge, need to spread that knowledge, and need to bring these knowledge generators, as well as users into participation with our community

Lilian – Final outcome of HFA: substantial reduction in losses. Question: is a reduction in probability of losses the end goal or should we be looking to build resilient systems (as the capacity to adjust, learn, think in advance of upcoming natural and non-natural conditions that could affect our systems)? How do we manage risk if the assets never existed? ie, when a community has never had enough food. We are thinking of DRR as a product instead of thinking of which process can allow human security? Concentrating on avoiding losses takes us to the same old paradigm of disaster management still focused on losses instead of building resiliency. Maybe information flow, learning, knowledge management, observation research, multilevel/multisector networking, all of them integrated into development processes should be the core of our business. RR should act like a vaccine and nutrition, bringing the exact amount of energy, information and networking (memory, linkages, etc) into the system in order to make it stronger and resilient. That is **the process** that really matters, the one that will make the difference, Avoiding losses would, in that case be only a desirable and natural product But not the final goal

Sahar – We need to not dismiss the changes in practice and success of many governments in implementing DRM measures. Examples such as low damage from Chile earthquake shaking, good early warning system for Sandy in US, or success of flood warning system in rural Bangladesh. Research in understanding roots and processes of success and failure in implementation of DRM and enforcement of codes and regulations would shed light to develop future strategies. Incentives are the core of human action. Do we understand the incentives of governmental entities/politicians to put DRM in their agenda? Communities incentive to demand

politicians for risk reduction investments/policies? Do we understand incentives for private entities to invest in risk reduction and incorporate risk element into their development? Do we understand impact of culture and religion, disaster frequency, etc. in general public's perception of natural hazards? It is necessary to also use social sciences to understand incentives, human behavior change, and psychology of communication in order to develop more effective strategies for DRM.

Chris – Drop the D in DRR: the D keeps us locked into intensive disaster risk; dropping it allows us to move into comprehensive risk reduction which carries more natural buy-in from decision makers and stakeholders due to increased relevance

Gustavo Wilchez- Chauv – Little prince & king that can control the sun... asked to command it will make it set at 6pm, not now. Women in households are best risk managers, but we don't upscale their knowledge, rather we become more bureaucratic as we move along. Cannot try to stop water... climate change

Steve– 30 years in OAS in Department of sustainable development. Lived thru 1970 earthquake in Peru, and part of team that looked at damaged housing. One town would be totally destroyed, while the next town only a few kilometers further down the road only had a few that collapsed. Broad challenge in 'cult' approach to development in excluding disaster risk except for that which is readily apparent. It is no accident that the HFA only measures inputs, not outcomes. Disaster Risk is not even on the top of the list, but closer to 8<sup>th</sup> after health, education, employment, security, etc.

Aromar - Is DRR capable of making the necessary change? Need to make a more concerted effort on plugging the effects of disasters on a macro level. On micro level, enough evidence of how this adds up is not yet available. DRR community is currently marginal in the discussion... how do we integrate ourselves into the process? Unfortunately, have to follow money train at some point. Resilience has become a strong framing.

Johara – Our world views are generally too limited to understand causal relationships. ie, unable to understand outcomes of possible policy decisions. Our world runs around myths that are both outdated and dangerous: such as development and need for perpetual growth. And, these myths are largely what lead to accumulations of risk. Can we reconnect people/institutions to the consequences, and if we can't do this then we should narrow down our scope.

Andrew – Wide set of ideas being presented, and not sure how to integrate into a framework yet. What is going to be the incentive structure for private sector to start building disaster resistant infrastructure. Definitely no need to put more resources into DRM as there is no evidence of efficacy. Solution may have more to do with social demand, private sector, informal sector, social media than the role of the state.

Allan – Syncretic approach so far to concepts and institutional development, but great confusion still exists. We are always undermining our foundations by returning to focus on disaster as opposed to latent risk. The syncretism thus fits things onto a pre-existing structure and then hope to better understand what is going on using the same thought structure. Eg. Dealing with the

Prospective/corrective risk mgmt division as if the two things were “similar” and needing similar institutional structures as have existed historically. Prospective risk management should really just be seen as ‘proper development’. If we don’t define DRR as a part of development as opposed to an add on to it then we can’t look at the problem from the right angle. So, when we talk of mainstreaming DRR into Development, it seems like a false premise: ie, development is still its own thing and exists without DRR. This really isn’t the correct definition of development. And, even those with the right conceptual view often waffle about and can’t get to new structures to support new thought. Peru: Civil protection is now only disaster attention, but the DRR side is still a problem even though it has been separated from the civil protection structure. At least concepts have been made more clear, and this has led to proper division of roles, even though they still haven’t quite figured out how to do the DRR side.

Stephen – Good hope on identifying opportunities coming out of this meeting. Now going to kick the half-empty glass down the road a short way to put a macro cap on it. 1. Hypothesis: at least 80% of loss is and will continue to be in private hands; the emphasis on public sector needs to be balanced with the reality of dominance of the private sector. 2. Idea from decades ago: that by 2000, there would not be a vulnerable school or hospital in the world! 3. In ~2000, Stephen calculated that cost of one B-2 bomber could retrofit every vulnerable school primary and secondary public school in LAC... it’s not about money, rather who controls it and where they want it to go. 4. Notwithstanding tribal conflict, ethnic cleansing, terrorist attacks, etc, the losses that we face given all of the existing natural hazard risks is even greater. The last time we faced risk of such proportions – nuclear war – the best sovereign states could come up with as a strategy was MAD (mutually assured destruction); now we need a strategy of s MAS (mutually assured survival).

Michelle- Building risk reduction into DRM instead of integrating risk reduction into development.

Andrew – Disasters as endogenous to development is not even there in the concept. This is one of the keys has has to be considered

Ilan – Power of persona non grata: that people against change have such power to abuse power, but this has also led to change... how much of the problem is specific individuals?

## **[EVENING DAY 1]**

### ***Public Meeting***

Adrian Bonilla – General Secretary, FLACSO. Intro & info about FLACSO

Yoriko Yasukawa – UN Costa Rica. Importance and recognition of deficiencies in DRR/Development. Debate of development models is occurring throughout the world due to the many sources of actualized risk, both of natural and social origin.

Roberto Gallardo – Planning minister, Costa Rica. Why have planning minister in this meeting? Planning was centralized and with a goal of industrialization of the

country. There used to also be a belief that market forces would take care of the planning problems. We have now realized that the model must be changed for the 21<sup>st</sup> century. Now goal of planning is so that transition to low-carbon emissions is possible. Climate change is expected to make development processes more challenging and risks to be greater. Each dollar spent on recovery is a dollar not used toward moving forward, and this has had a huge cost. 1.8% of GDP spent on recovery. Due to CR being mid-income country has limited access to resources for development, which increases the need to insure that investments are effectively made.

Andrew Maskrey – UNISDR. The central preoccupation for this meeting: 2005 signing of HFA with an objective of reducing disaster losses before 2015. Every 2 years, HFA monitor has indicated improvement toward HFA goals, however, losses have continued to accumulate. Divergence between the apparent success of implementation vs. losses. Governments want 10 more years of status quo... so goal of this meeting is to explore that implicit decision and the implications. Especially salient in LAC: growth of urban centers of 400%.

Michelle – How do we build resilient nations? Disaster shocks are endogenous: derive from and contribute to patterns of development although we have a tendency to see them as exogenous shocks. 1. Have we framed the problem in the incorrect manner? Have we placed DRR on the periphery, instead of center of the development discussion? 2. How do we advance the relevance of vulnerability? Development paradigm is growth-centric, but not very integrated in terms of taking into account social implications of development. If we accept vulnerability, we have to accept the responsibility as well. But, for this we need incentives to reframe the problem. If we have all this evidence and mounting losses, we should have the necessary incentives... but we don't. So, where does social demand come from, and how to we create it? Is there adequate understanding beyond the political class, and into broader civil society and private business to make decisions with long-term impact? A range of complex priorities lie in front of decision makers, and pressing issues, so how do you get them to make long term decisions? Issues of social enforcement. How do we communicate about risk in a better way, at personal, institutional levels? Can this lead to improved enforcement?

Stephen Bender – Vulnerability, how we got there, how we can fix, who pays, and who benefits. EG: OEA study in Ecuador toward types of risk to natural hazard events for a variety of crops from a variety of event types that would impact the agro industry... not first or last time the OAS focused on the economic aspects of disaster impact in terms that the vulnerable sector would understand. Identified a bridge over which 40% of bananas for export were transported, and another over which were transported 40% of fruits, vegetables for Quito. Mentioned to the Ecuadorian minister the importance of these bridges... whether he wanted to have to deal with the fall-out from wealthy banana exporters or angry farmers demanding relief after a disastrous event. That is a political decision, not a technical one. Disaster Risk is about #8 priority. But, we still have to find ways to resolve these problems.

Mark Pelling A couple of examples of community level interventions: one failure, one success. First what is DRR? Not building DRM onto development, but rather

changing the nature of development so risk is built-out of objectives of development. A struggle most fundamentally over values that people can consider, be aware of, that configure their situations. 3 measures of appropriate DRR: risk, development, success over time over 3 fields: values, policy, technology. Two Oxfam projects: donor required projects be completed in 12 months following the typical recovery cycle, even though DRR cannot possibly be done in such a time frame. Cutting edge methodologies. 1. Intervention in Guyana: 4500 people involved, many public outreaches, 12 community groups were formed that each undertook a risk mapping and risk mitigation project. Reviewed by Mark 12 months after completion: only 1 of the community groups was still working. Sustainability criteria obviously failed. Was actually quite polite of the Guayanese to have participated, and was fun, but historic problems on political side. Hopefully there is some latent knowledge in the community, otherwise a failure 2. Intervention in Dominican Republic: 7000 people involved, similar structure. Principal difference: NGO staff came from the community itself. High integration, respected, etc. Already lots of community projects that were self-funded. So, this project was 'business as usual'. More dense population so not as many community groups needed (6 in total). 12 months later all 6 community groups still functioning. Most importantly, project led to changes in development. One project: build steps for evacuation, and this was completed. Steps had use for people to walk at times of no disaster... which had an economic value for everyday use, demonstrated by increased property values surrounding stairs. Also, reduction with violence, related to drug gangs. Took 1 year to organize youth camp for DRR and community leadership. Challenge: bring participants from two particularly challenged communities. This led to construction of bridge b/n two barrios which had been challenged because of fear b/n communities re: crime that the bridge could bring. This DRR bridge in fact is principally used by students.

Aromar Revi – building on what colleagues have talked about. Costa Rica, looking from the outside, looks pretty good, and very interesting as it is 2<sup>nd</sup> country to implement a sustainable development plan. HDI is .8, but becomes .5 if adjusted for GINI (20% poverty). Great use of renewables. The question then is: where are the risks coming from? 1. Macro-economic risk: large countries to both south and north, trade is moving to Pacific, but CR straddles the two. Recovery from 2008 crisis was rather fast, which shows not being too critically linked to world economy. But, why so much poverty? this should have been addressed a while back. Savings rate has been dropping and not a good place to be... how do you make this up in case of a disaster? Debt? Not a good option as there is already substantial fiscal deficit. Could increase economic efficiency: but not easy to do due to mature economy and structured labor market. A good place to increase resiliency is in eco-tourism and related services. Unbundle output losses and capital losses... a significant knockdown in infrastructure could take quite a while to resolve. So, important to build a buffer.

Pascal Girot – Reflections on discussion from a Central American perspective. LA is a highly vulnerable area, and we are constructing more vulnerability. Mitch's influence, SICA/CEPRENAC influence in strengthening institutional capacities. There has been a reduction in fatalities, but increase in economic losses. We still have "blind" sectors that don't integrate DRR even though they are supposed to do so according to their planning documents. Over 50% of population in CA lives

under poverty and under conditions of high vulnerability. Agricultural sector is only now starting to take this into account, especially w/n small farmers without access to irrigation, which are the most vulnerable to climate change. Still have a disconnect b/n development and disaster risk, for example CNE's involvement in Cinchona where it should have been development, agricultural agencies. How do we confront this? Macroeconomic difficulties due to financial limitations, but there are many qualified and interested actors, so cost is not that big of a deal. Problem in that there is not a pressure for political change, improvements. Opportunities: planning minister's participation demonstrates importance that is being accorded to the topic; many things that can be done don't increase cost of development, which is a common fear; need to demonstrate increased sustainability that can be derived from improved integration of DRR.

Carlos Carranzo – Director of the school of Public Administration, University of Costa Rica. Planning topic needs to be expanded. Need to strengthen administration processes and better define what is meant by risk. Need to expand topic beyond experts to general practitioners. Need to improve information systems and use of statistics. Need to strengthen evaluation processes, with different options and approaches. Research, knowledge, and practice often go in different directions... these need to be reunited.

## [DAY 2]

### **SESSION #1: Conceptual and notional underpinnings**

Andrew – Key points coming out: 1. If we start w/Disasters as exogenous, then everything that flows is wrong. 2. HFA measures inputs vs. outputs... how do we come up with indicators that monitor outputs?

Ilan – Need for a “top 10 disasters averted” list

Chris – Following Ilan's comment, a database of events without disaster would make for the strongest possible counterfactuals on loss data... without counterfactuals we really have no “ground zero” from which to relate losses to vulnerability as there is no way to adjust for incidence of natural events in the loss (or non-loss) data (currently we proxy this via analytical hazard/exposure calculations). Disaster databases will always put the focus on disasters, not on the variables that turn events into disasters; what we need is event databases with loss (or non-loss) data.

Allan – Governance systems to create laws versus a culture to implement necessary change. Everything starts from concepts. Main Issues include: DRR “mainstreaming” versus redefinition of development; reduction vs. control; hazards dominated by extremes vs. extensive risk and multi-vulnerability; intensive vs. extensive; exogenous vs. endogenous; disasters as autonomous vs. integrated (ie. probabilistic causality). We have been talking about this for 20 years, but many people throughout the world haven't yet been exposed to these concepts. “Good things can be done without concepts”, but in general it is an important approach to tackle first.

Mark – 3 things that have changed over past 2 decades: networked society- how do we reconceptualize risk? Take vulnerability argument and apply to exposure

and capacity, like insurance, civil society, information flow affecting policy in other places... interconnectedness. 2. Anthropocene – we are hitting the limits of sustainability... more than ever a responsibility for confronting issues of consumption, justice, etc., 3. Economic crisis: overarching risk processes and a slight warning that risk is becoming more of a political discourse... abdication of responsibility... no more security provided by governments, rather risk management... probabilistic assumption that they have some security, but may be an outlier (and many, if not most, may be outliers). Provides options for holism but also a double edged sword.

Andrew – Mexico meeting of finance ministers: still no acknowledgement that they are responsible for risk creation... rather push for more insurance. Ministers are protecting against government risk, not the national risk. Citizenry imagines they have this coverage, but disasters reveal the gap with reality.

Stephen – 1. At least a decade of observation and writing on evolution of risk... is it financial, economic, or physical, and who is worried about which kind... emergence of sovereign financial risk about protecting the national treasury of the sovereign state without a tie to actual on the ground risk. 2. Feels that there is an unwritten consensus in this discussion group that we are all in the same place. Many insightful comments in the two pages submitted earlier, but these don't represent a consensus in vocabulary, focus or approach, but this isn't bad... we should all rewrite our two pagers specifically addressing where there are outlying ideas or else more focus in the group in order to get to a unified view. Will GAR 15 tell us how we got here and provide options for moving forward, or will it provide a limited set of strategies that all should follow, emphasizing norms over performance?

Johara – from a practitioner perspective of slow onset risk. 1. Concepts are important, in particular capacities discussion because of importance of building on existing capacities. How can people's own innovation and drive be leveraged? If we have indicators on outputs this could take away from importance of process... maybe we need more indicators on process as well. Testing models in Somalia: how does early warning systems improve drive for people to make change. 2. Drought/flood modeling cycle needs to be undertaken. Same actors are affected by both cyclically... how do we do that and integrate it? 3. Cumulative vulnerabilities/multi-risk... drought, fire, conflict, displacement, protection, disease, plus disasters which all make it harder for them to move forward and is very important to address in slow-onset areas.

Ilan – Why so many bad ideas. Why do individuals that tend to have closed viewpoints tend to ascend to power, the same individuals that tend to refuse to look at alternative options. Where is the human nature in this?

Mark – If we take risk as endogenous to economic development processes, it also makes risk endogenous to ourselves. How is one able to leverage well-being and a fulfilling life to comprehend and address their own endogenous risks?

Alonso – There are many rational decisions underlying policies, but often there is a selective use of evidence.

Pascal – 1. CCA tends to privilege hazard as the only driver of risk, while sidelining vulnerability. On the other hand if we are pushing adaptation, what are the

tradeoffs: does one's group's adaptation cause risks for others? Need more sophisticated models for this so that we take into account downstream effects. 2. Who are we directing the GAR toward? Trapped within an intergovernmental system... in CC COP is a trap: it is now diminishing returns. How can we have a civil society arm of the GAR to inform/build a global action network that can get down to the grassroots level?

Allan – How do we set up the problem in ways that people read and look at it? Are there methods, approaches, etc. we can use... eg., what does the hybrid risk curve do toward more holistic perspective of risk? How do we transmit the conceptual underpinning without falling into a narrow area of the field, such as risk transfer.

Gustavo – Monty python: discussing who had the most miserable childhood. Competition of which country is the most miserable: Give façade of risk reduction but in reality need the disasters from an economic position. Just like products that don't last long to require a re-purchase. Wealth depends on poverty and vulnerability... so where is the incentive to stop this engine?

Kamal – From practice perspective: Prospective, reactive is a good conceptual framework, however all of these processes happen at the same time, so shouldn't over compartmentalize. 2. DRM is hard wired into many governments, businesses, etc. , but the problem is that it was done a long time ago but not revised. How do we bring about a more dynamic way of implementing DRM? 3. Over last 15 years there are many examples of good practices... why do we abandon these good ideas? [CL- same as reason we make more laws rather than insuring proper implementation] Seasonal variability (interannual, interdecadal) is now out of fashion, while CC is in fashion.

Mark – Maybe we can emphasize social construction of risk. Problem with bounded discourses and myths. What are the ideas that are allowed to be debated? [CL- similar to Rich's "public behind curtains theater"].

Andrew – Alonso's comment on "decision makers"... proposition: do decision makers actually exist as a category? I propose that they don't actually exist... I have never actually met one. Rich's comment on what is the process of avoiding taking decisions: most decisions seem to be made by avoidance to make decisions. We have to weave in a critique of how international cooperation (via NGOs, UN) may have a negative impact. In linking concepts to instruments we help a lot: eg Desinventar coming out of La Red.

Stephen – 800 pound elephant: explicit challenge of dealing with risk while dealing with other development facets... millions moving to coastal areas for extractive industries, processing, manufacturing, exporting and importing, distribution to markets ... the global economy turns on this. We will never sell loss reduction on the basis of risk reduction, but perhaps we can do it on the basis of justice, particularly for the poor. An idea of a working title: "We have summed up what has happened, but we have not come to terms with adopting and carrying out the solution " "Sumado pero no cuadrado"-summed up but not squared off

Juan Pablo – Concern: 1. many ways to measure risk, vulnerability. Exposure, fragility and resilience are the typically measured things... but we are all really measuring exposure. Need to look into behavioral risk. We so focus on indicators that we forget the human realm. What can we measure in humans to indirectly

measure fragility in the face of a stressful event? 2. There is an opportunity in front of us in argument of financial risk: how do we leverage this into other types of risk? How do we take advantage of what we already have but is dispersed?

Marco – 1. Scuola Napoletana of 18<sup>th</sup> century: focus of economy on well-being, the other schools shifted toward wealth or other more materialistic considerations. What are we trying to protect in the end through DRR? It is not totally clear nor explicit – this has far reaching consequences on big governance questions. 2. Do we need to factor (not well functioning) institutions as part of the risk equation? 3. Decision makers: if we are going to a governance model, how do we create a participatory decision process taking into account the institutional risk component?

Michelle – a good point to come in on as she is struggling... all is too complicated. If we start by saying that this is endogenous, it is not a drivers conversation, but rather a values conversation... so what exactly are we trying to protect? Language of risk is alienating... doesn't create sympathy, action. Why are we not acting? Because discussion is too abstract. GAR needs to have an audience of every-day people. Difficulty in sitting with a minister of finance, etc. and not having their eyes glaze over. Really, discussion is about reducing dependence, at national & individual level.

Lilian – Similar feeling as Michelle. What do we mean by avoiding losses? What does this mean to someone living an unstable slope? Hunger risk vs. landslide risk... it all comes back to issue of chronic risk. We are so afraid of the complexity that we try to compartmentalize it all. So, information ends up fragmented. . So, back to Mark's comment on what is different: interconnectedness, information systems, collective decision processes, participative research. We should stop thinking about losses and manage memory, innovation, and participative research, more on how and less on the product.

David – 1. Who is our most significant audience? Are we personalizing concepts and depersonalizing people? So, risk becomes the major actor, but it is no one. "Risk ownership"... no risk without people. 2. Should we rely more on authorities and DRR ownership rather than decision makers? Many decision makers rely on authorities to inform them... could be easier to approach these people. They all respond to different interests and ideological constraints. 3. Instead of trying to get development actors to integrate DRR maybe we should integrate development into DRR. Resources, investment, productive and servicing facilities, income generation, jobs, continuity of activities and sustainability. Ask: "What cannot be lost, what cannot be interrupted"- that is who we should be talking to.

Gustavo – People are aware of human rights, but not to risk. Link children's human rights to risk reduction.

Franklin – Decisions are made within a process. Term "decision makers" needs to be unpacked. Time dimension to glass half full/half empty. Who in cabinet is responsible for risk, where is the Chief Risk Officer in government institutions? Literature and standards on how risk management should be handled at corporate level... much to be learned by states.

Aromar – Much of discussion is based around fear, which is itself a powerful tool. But we are trying to use fear for disasters not in the here and now. Move beyond

risk reduction toward transformative development. Crises provide opportunity for unfreezing of the system. “Tipping points”. When you are in a non-linear regime, you have opportunity to change... CC guys are dealing with the same problem. 3 elements: Floor, boundaries, regime of structured change.

Marco – when developing strategies for action, we should not take for granted that everybody agrees to reduce disaster risk, nor necessarily has to. Also we need to be mindful of the fact that whereas many are supporting disaster risk reduction in principle, they do not necessarily act in practice..

Chris – What we need is “dashboards for decision makers” and “pitchforks for people”: arm decision makers with the tools to make the right decisions, and arm the people with the tools to sack their decision makers if they resort to the standard non-deciding methods.

Allan – first, establish the central question, then the central mindset for responding to that question. The central question is to increase the capacity of society to leverage options for the future and avoid loss related to risk you already have on the ground. Who reads this problem well? Can’t expect DMs to read it well as they are not in development. There is no answer... how you read the problem defines how you approach it... we just need to find the most efficient one for our purposes.

Rich – Is it time to send the GAR in the direction of political risk? If you want to make this sellable you want to get attention... shift to political risk and political opportunity. We love the professional-technical stuff, but it is not sellable. If we can reframe this the whole readership changes.

Michelle – The problem we are trying to solve appears to be inaction. How do we make people act? We talk about risk, not what is inside it.

Allan – Gustavo’s point: people don’t think about “risk”, they just get on with facing up to it.

Stephen – Disagree with Michelle: it is not inaction, things are the way they are because someone wants it that way. We have to hold those people responsible and accountable.

## **MORNING COFFEE BREAK**

### **SESSION #2: Risk Governance**

Marco – (chairing 2<sup>nd</sup> discussion)

Important points brought up so far: challenge is how to design decision making processes and implementation mechanisms that are inclusive of all stakes and holders; “stakes”: goods, values that need to be protected: is there even convergence on what they are, and does there even need to be convergence? Some of those “stakes” may have been already defined, for instance, under the law, like Human rights. Question of role of states in determining some of the stakes through the institutions: executive, legislative, judicial have their own stakes, as well as its role in integrating stakes coming from public and private “holders”.

Language that should be used... 'states' vs. 'governments', as there are other "powers", beyond the executive, which are critical. Public vs. private and blurring of the line b/n these, and this has an impact on cooperation opportunities between public and private as well as on the definition of accountability mechanisms, responsibility for risk creators and risk receivers, and liabilities. Under the law, do we have a clear obligation to prevent and actually reduce disaster risk? Are normative frameworks able to include and reflect institutional and scientific learning, as fast as necessary? Formal mechanisms are not necessarily "the" solution: how to integrate informal, yet effective instruments, with more formal mechanisms? Instruments that can help regulate... are we clear what we need to regulate and what instruments are appropriate for that regulation – binding vs. non-binding instruments? Is it enough to have DRR regulated through non-binding instruments? Possibly good for flexibility, but likely weak in enforcement? Do we need an "authority" to make things happen? How would it shape up? What powers should it be endowed with? Is it an institution (and if yes of what nature?) or something else? Question of "decentralization" - local, national, regional, global levels are typically used, yet few actors really work at one level only; discussion needs to be articulated further. Dropping the "D" in DRR?... important implications. Should we keep speaking of "risk governance" or we need to move toward "good" governance, and make risk management a criteria for quality determination (good or bad) of governance?

Juan Pablo – 1. Authorities: the practical implication is division b/n sectorial and territorial... Marco's comments are more on territorial. But the sectorial framework brings in multiple authorities at each of the local, national, etc. approaches. 2. First legal framework, authority, accountability, liabilities... but one that we haven't explored: compliance. We have not pursued this compliance side... what are the motivations/blockages? 3. Everything we have said is in the formal dimension, when most of the accumulated risk is in the informal dimension? What mechanisms are at play that are not part of the formal processes.

Ilan – Marco, and many here have moved from DRR -> RR -> development -> governance. How much should we deal with governing ourselves? Aromar's point on fear: when we are being governed by risk, how much should we fear versus hope? Machiavelli: a true leader should be both feared and loved. Governing risk or being governed by risk?

Kamal - 1. How do we measure quality of governance? Looking at countries affected by Indian ocean tsunami: best recovery happened where there was no DRR agencies, rather it was quality of governance. 2. The challenge: To build basic governance systems takes 20-40 years, yet all of our work has a much shorter time horizon. 3. Issue of legislation: proliferation of bad practices. Typically just an expression of political will, but not actual on the ground change in most cases. How do we avoid having legislation be a political cop-out?

Andrew – 1. Reflection on Juan Pablo: becoming more uneasy with dividing b/n formal and informal as the formal is becoming informal. eg: 11 story building next to his house in Lima in zoning allowing only 5 stories... the informal becomes formal, or vice versa. Omar Dario Cardona went to Quito for assessment of water system: the many things the water system was doing to provide fresh water- this is clear risk reduction. How is water, garbage, security, business continuity

handled? These are the on-the ground risk reduction practices, under a label of guaranteeing basic services. Risk reduction as a co-benefit. 2. Need for government Chief Risk Officer is definitely something to be considered. 3. How business sector and public sector can work together. Especially since development processes are generally out of control in many urban areas... need mechanisms where businesses, utilities and local governments can work together for mutual interest. Example of inauguration of new Trump tower in Panama where building was flooded by mix of storm water and sewer.

Stephen – 1. To only refer to executive when mentioning government is misleading, especially as participatory government gains traction. More and more the judicial and legislative branches are used, up to where the judicial is giving orientation and instruction to the executive branch (city council, provincial and national government) and to the legislatures. 2. Not only governance by the public sector... governance by society and culture is often overlooked through custom, tradition, taboos, superstition, etc.

Allan – 1. If we look within the framework of ISDR and HFA, the whole notion of disaster governance becomes ossified-what you are asking governments to do is to increase the number and density of DRR institutions as opposed to creating structures based on sectors and territories and linked to development. We tell local governments to only use one plan with subparts of the global plan, yet we regularly find independent plans. Holism is not a characteristic that typifies our work in DRR plans and processes Maybe we need to stop talking about risk governance, and subsume it within a wider and more relevant discourse. 2. Costa Rica has new traffic laws with high fines, but very many still disobey the law when a policeman is not close. So, question is what is the relationship between culture and regulations? What is the value of a law if there is no culture accompanying it?

Alonso – Need stronger emphasis on weight that corruption has, especially in consideration of relationship b/n informal and formal sector.

Gustavo – Comparing to Rubik's cube... Need to be aware of impact on other sectors of any given sector's policies and/or changes. Without awareness that the center block cannot be moved, no matter how one rearranges the other blocks, one cannot solve the problem... what are these non-negotiable things? We cannot build governance only between humans... ie, water must be included in participation or else it will indeed participate in its own, most likely negative, way. Some plans can be partially illegal, completely illegal and possibly either from a negative or positive way. Need to include natural resources as an actor, or else that actor will participate on its own terms. Community memory and simple solutions. Bio indicators.

Franklin – on building a culture of compliance. Transparency, corruption, and public policy. Corruption in state activities are common causes of disaster losses, yet seldom brought to light. Quasi-public entities are important to focus on, not just public and private. These are important to the risk dimension.

Johara – sectors, human rights, and pitchforks. Why are we being shy about decomposing the rights issue so they can demand protections for both this and future generations? 2. DRR/CCA: D and CC had already been dropped from her

title, so now just generic risk reduction, which enables her to tackle problems in a more holistic and integral manner.

Chris – 1. International bankruptcy, as well as individual bankruptcy and relationship to risk and sustainability: unsustainable debt payments make RR impossible. 2. Quasi-public entities and incentive for instability: Asuncion water supply privatization; Alaskan Oil pipeline & maintenance; Fed and member banks - all profit from cyclical and instability. 3. Intergenerational justice, children and lack of voice in this direction

Gustavo – you can use children’s rights as a proxy for risk and sustainability.

Sahar – Build on Andrew’s point on entities that are doing endogenous risk education in various sectors. The risk reduction community is mostly functioning as a separate sector and hasn’t been integrated into other sectors. This might be based on the perception that an independent identity would lead into more funding and job security for people in the DRM community. Maybe GAR can challenge DRR community’s proclivity to define themselves as a distinct area. Incorporation of risk reduction into development of each sector should become a measurable objective for DRM and even the next HFA. Related to governance and sectors: part of the challenge for governance is the lack of knowledge and understanding of levels of risk, options for risk reduction and mitigation and the other challenge is lack of capacity for implementation. The multi-hazard risk models are good, but too complex for most of the end users.

Mark – Resilience has an associated neoliberal implication. Resilience governance may promote increased transparency and conventional wisdom. Resilience governance is not efficient, and that is being celebrated: if a project fails it can lead to benefits in the future. How far can one push in resilience dimension or do we even want to?

Chris – Resilience, universal health care and lack of more micro-experiments in the US health care sector. Worst experiments could provide the best potential learning lessons. In this mode, resilience would be progressive: all must experiment to improve, as is always the case with human progress (just make sure we help the losers over the short term). Difference b/n neoliberal resilience and progressive resilience could be in feedback mechanism to insure that those in failed resilience experiments have recourse to resources on the short-term until local resilience is aligned with results of the successful experiments.

Pascal – from discussion on what are implications of climate risk? Notion of common but differentiated responsibilities. OXFAM: who is going to be responsible for the greenhouse gas mess? Typical issues b/n US and China: China has higher emissions, but lower per capita, and US has been putting these gasses in the air for much longer. In LAC, we often blame exogenous sources: blame a flood on US and climate change, rather than looking at how they created the context for the problem. Hewitt’s ‘politics of endangerment’. Rights and entitlements: right to safe water, housing, schools, etc. and ability to act on conditions that will make these safe. Rio 1992: “think globally, act locally”. Back to the idea of a civil society GAR, and making governments accountable for risks.

Allan – Climate change & poverty- two way street, if it is argued that difficulties with adaptation is a problem of poverty, then developed countries aren't responsible according to them.

Rich – Example of paper on earthquake risk and public trust based on a public opinion survey in a top-rung peer-reviewed journal. This is the type of evidence that may help drive decision makers to make the right decisions.

Lillian Accountability: There are cases where external agents interventions in legislation or creation of institutional frameworks have to be considered very carefully, taking into account the responsibility involved in such processes.. In Bolivia due to El Nino 97-98 and 1998 earthquake there was a natural evolution for sectors to reflect on problems and generate DRR programs, and there was also important initiatives in terms of environmental issues, that had to be considered but this evolution process was somehow constrained by the creation of an independent DRR system and the creation of a national system with two heads: planning and defense with no consideration of the required link with the environmental law and the limited inclusiveness of the important role of Heads of Sectors and territorial government levels in DRR. (Lilian).

Chris- Local level or local based / supply or demand driven Risk Reduction? Difficulty with international level workers: intrinsic, often well meaning, paternalism makes it difficult to “hand over the reins” to localities and let them “pull” down what they need.

Michelle – where do we want to go with the GAR based on these discussions? What? For whom? Central question? Governance at values/drivers level or nuts and bolts level? Would appear to be more rewiring, less nuts and bolts

Stephen – based on Pascal's climate change and differing views of who is contributing what and over when? Lack of acceptance of the commons... if you parse enough words you can continue the debate without getting to the underlying problem.

Aromar – several tensions: endogenous/exogenous; mainstreaming/maintaining sector independence. Need to be able to find minimum conditions/non-negotiable issues. Good governance often reduces risk, but that is not a given condition. Framework of good governance may not be sufficient: need better learning. 3 things: there is no “there”... it all feeds back. No real transfer. Intergenerational equity. All come from level of interconnectedness in the world. ie, it is now a zero-sum game, no more externalities. Entitlement/incentives framework works in some cases, but not in others

Franklin – sound bite: good governance means reduced risk. Reduce or avoid moral hazard.

Chris- governance should maybe exclusively be risk management. ie, all tasks of government should be tethered to risk reduction or else not be something undertaken by government.

Andrew – need a clear division of what we can learn from the past and what we can use to shape the future. We are mainly grappling with the future, and we don't have evidence as we haven't tried doing them, and if we have, we generally don't have the necessary data to justify these. There cannot be one size fits all recipe,

and shouldn't expect GAR to play that role. Maybe we should have a series of 'think pieces' that should go into recipe, without defining how the recipe should go together as this will vary from place to place.

## **AFTERNOON DAY 2**

### **SESSION #3: Political, social, economic incentives for risk reduction**

Introduction by Ilan Kelman

Ilan – How do we effectively make RR relevant and less abstract? By most measures, DRR interventions are cost effective, yet often not done. Visibility/invisibility of risk reduction measures. How do we make Andrew a centerfold? How do we make DRR sexy? Cost effective, relevant, sexy, etc.... why is human nature not comfortable?

Chris – Risk is sexy, DRR is anti-risky: see royal peacock and food chain risk linked to attractiveness to opposite sex.

Andrew – GAR 2009: no country for old men. Come back to underlying values in society. 40 years of neo-liberalism, deregulation, etc... what values are going to dominate for the next 40 years? Still fighting to instill values that are diametrically opposed to DRR's goals. TV: complete confusion: ice caps melting, polar bear habitat disappearing and then followed by news of auto production finally picking up. We can't sell risk reduction. Thus we need to put the incentives in the direction of where there will be buy in in terms of co-benefits (i.e. clean water, etc.).

Lillian – we have promoted the separation b/n the DRR community and the humanitarian community, and this has been a step backward. Secondary risk: in all cases assets to be protected by DRR are lost. If emergency response is there to handle aggravated problems, then it is addressing the accumulation of latent risk, yet we have divorced them from the DRR and development fields. Emergency and response phases actually are some of the best opportunities to address risk sources, rather than waiting until post-response for DRR actors to come into play. Humanitarian and response actors (individuals and organizations) should be considered as key messengers for DRR and resilience building. Their direct contact with disaster as the actualization of risk make them also important actors for gathering useful knowledge to transform structural and secondary risk conditions.

Mark – 1. Change doesn't come from the top-down. Importance is in engaging local groups. How do we get endogenous experiential learning? 2. Knowledge exchange: how to transfer scientist's practice to end users. How to better understand organizational and institutional structures in order.

Chris – Focus reconstruction on building educational capacities so that those affected by the event are the ones that actually do the reconstruction. Injecting funds to educators provides similar short term stimulus to the economy as do direct reconstruction activities except that these can achieve much higher buy-in from local groups and at the same time bringing decision making down to a more

local level insuring more effective use of reconstruction funds. AT the same time, this provides the opportunity to introduce DRR & sustainable development concepts into the cultural/social knowledge base.

Allan – short, medium and long term selling of the process pose different problems. Droughts and floods are harder to sell than earthquake risk due to different perceptions. Since we don't monitor success of DRR interventions, it becomes hard for us to assess the cost/benefit.

Kamal As has been pointed out earlier, post-disaster recovery indeed is an opportunity to promote disaster risk reduction. However, in order to successfully and meaningfully accomplish that, it is important to have preparatory work even before a disaster occurs. Otherwise, the rhetoric of “build back better” after a disaster can do more harm than good. This is because a political push to disaster risk reduction after a disaster tends to ignore the entire spectrum of risks and is based on (often transient) perceptions of risk rather than actual evidence. DRR/reconstruction without proper background studies often increases risk rather than reducing it. Or, there may be a switch to just a different set of risks.

Franklin - “build back better” vs. “build back better livelihoods”

Michelle – Should we be thinking of role of private actors in providing incentives? Curriculum reform is a slow process, and challenging to put all of the priorities in. How do we create a more natural change in education so it flows into culture? Finding entry points that localities can understand. eg: culture of recycling which hit a huge wall in Barbados: manufacturer of plastic bags was obviously hugely against this. Should we be shaping tastes?

Andrew – Leveraging certifications according to risk... gets us closer to pricing risk into assets. Clarify ownership. This needs to be further explored.

Pascal – building on consumers and playing with markets that makes them more responsive to risk pricing. ISO is very limited and technical to actual industrial hazards, but we could use something more along these lines for housing, etc. Markets respond well to incentives, but how does it work the other way around? How do you dis-incentivize risk creating activities... how do you trace back history to make those responsible pay? We need a stick, not just a carrot.

Juan Pablo – like the idea of creating value. Other message: be careful if we think private sector is going to save us. Business continuity plans, which is strongly associated with DRR, are found only in 45% of large companies, and 14% of <100 employee firms.

Mark – Incentives for what? Quintana Roo – Yucatan area. Excellent at emergency response... plan preparedness is in place. Is that what we are interested into? So it is resilient development but it is the antithesis of sustainable development. A model that is protected by DRR, but hugely contributes to climate change.

Pascal – Quintana Roo is excellent example... last rebuilt in 6 months... but did they do anything in a more sustainable model? No, more of the same.

Michelle – It is perverse, but we can't really expect much of a change while incentives are the same. When we conceive of solutions, we have to make sure these are contextualized within the day to day reality of people on the ground.

Franklin – Similar to problems with dealing with formal/informal sector.

Steve – Talking about scales. Bounded economies where there aren't many options. The gaps b/n development and risk management approach aren't manifestations of errors, omissions, etc., rather the risk is recognized but is chosen not to be acted upon for any of several reasons. Some of the situations that families, countries, etc. suffer are catastrophic and they are unable to recover. Ecuador: 90% of GDP is exposed to volcano, earthquake, tsunami... there are places that will be pushed to the edge.

Johara – I like to build on what is existing and add a layer to it. Rubik cube idea with non-negotiables: what could be the leverage points and non negotiables that we can apply pressure to?

Stephen – can we really find these leverage points beyond the non-negotiables in the context of representative democracies and free market economies... we have looked before but haven't been able to really find these.

Aromar India doesn't have liability process for engineers or builders but does for architects. Impossible to get anything out of that. Establishing the chain of liability is extremely important. How do we establish a chain of causality that makes sense of things?

Mark – Local incentives for sustainable development: 1. There is a general fear that RR is a challenge to development, 2. Would be nice to demonstrate visually the trade-offs between short-term development gains and longer-term risk. And show who wins and loses over time e.g. footloose global finance wins from a hotel investment on a low-lying coast; migrant workers attracted to the area lose when their homes are destroyed in a hurricane. This is a first step in considering responsibility. CC requires a revisiting of responsibilities even if this is politically sensitive. This is not about rich and poor governments/countries/states – but about investment capital and labour and a questioning of her current social contract between these two in terms of risk burden.. It would be fun if GAR could develop some graphics to show the proportion of wealth and risk generated by specific development types e.g. coastal tourism and where this goes – local, national, global. This opens up questions like – the national capital gains tax how is this spent – does it cycle back to reduce vulnerability in the local area of elsewhere? Perhaps some idealized models and then detailed case studies to open debate on responsibility across time and space and between development processes and risk management. , 3. Something that could put pressure on governments to do sustainable development for risk reduction. GAR is very good at visualizing things: can we develop case studies, look at size of wealth that is extracted and amount of risk that is generated from those activities. Mexico example. How do we visualize and make simpler many of these more complex things.

Allan When we analyze disaster impacts and loss we always start from after the event and measure now and looking forward. But what would happen if we measure how much wealth has been created in the years or decades before the event by creating vulnerability and how this wealth is divided up and distributed?

Aromar – this is in GAR 13 in terms of moving and out of poverty.

Gustavo – Bogota- many years of educating people on how to produce less trash. Mayor decided recently to make a public policy toward this. Municipality worked with several corporations to increase dignity of life of recyclers by giving them motorcycles to do their work instead of horses, and some other details. However, strong economic interests are involved in that, who are involved in both previous and current governments. Mistakes were made in implementation which caused a short-term trauma (2 weeks)... just the fact that he touched the interests of the mafias was a very big problem. Mayor stopped building housing for poor people in flood area: however this was used against him as if he was blocking housing for the poor. Now trying to throw out mayor, because what is in the middle are all of the economic and political interests whose business is to construct risk in the face of a government that wants to change things. Bogota has taken up almost 50,000 hectares of wetlands that were dried out over the last century. The remaining 500 hectares have prevented countless disasters, yet mayor is being demonized due to blocking projects from being built in these wetland areas. Other examples: wall to prevent landslides without dealing with water, led to landslides on both sides of the wall. Gustavo gave example of trying not to vomit by taping our mouth shut.

Marco – for GAR 15, GAR is telling a good story that is very practical. Maybe GAR 15 can be used to capitalize on previous GARs and continue building the story. Instead of competing advocacy, build upon and integrate with existing story.

Aromar – If we choose 100 events throughout the world, and get a few stakeholder/voices could build a very powerful narrative. We need prospective answers as the old won't work on the new.

Marco – It's not a finished model... most paradigms try to sell a finished model, we are offering an open model that can be built upon, not closed to other paradigms.

Allan – How can the promotion of all this be done? Never hear of a ministry of sickness or a Ministry of Insecurity, so why Ministries of Disaster or Risk?. How do we move this around from negative to positive spin, because focus is still on disaster?

COFFEE BREAK

## **Synthesis & Wrap-up**

Alvaro – Long term vs. short term decisions. Sustainability vs. Effectiveness matrix: look for effective and sustainable solutions. Risk is a part of modernity. How do we create/change values?

Andrew – next steps. GAR 15 3 parts: 1. Global risk model, 2. From risk to macroeconomics of risk and identifying some of these risk failed states. "Toxic asset class", Retrospective items. 3. Moving forward: Allan and Andrew will be working next two weeks on pulling all of these discussions together into a paper to synthesize the meeting. This will then be circulated to comment/critique/add/delete/change/recommend. By mid-may should have a consensus document. Next step is to scope out who can do the work which derives from the debate. By October/November could have drafts of the papers. Reunite this group around November to discuss these pieces to finalize by April 2014. In Jun 2014 start drafting the next GAR. Needs to be linked to HFA II & SDGs. Ask

Gustavo: how to make a virtual Rubiks cube. Provide ingredients, seasoning, levers, pressure points, but not recipe. NY 15 May GAR launch would be good to see as many of you as possible. Global platform: hope to see all of you there. Thanks everyone for all your inputs, Allan and Flacso for hospitality. Great group that worked together.

Aromar – 1. Transition from DRR to resilience to sustainable development has seen good progress. 3 options: mainstream into SDGs or integrate into CC or do both. 2. HFA process: extend HFA to outputs or align HFA to SDGs. Need to link outcomes to money.

Gustavo – Often we hear of the word myth as something negative, but has always been valuable for humans in understanding their world.

Chris – There is an incredible degree of overlap between everyone's ideas. We need to take advantage of this commonality & redouble our efforts to educate people on what is to most still a novel paradigm for looking at their world and their risk. Frustration is natural in getting a large train to start moving and building speed.

Sahar – first 2 sections of GAR are the foundation, these two need to be well linked to the 3<sup>rd</sup> section we've been discussing in this meeting.

Lillian –Thanks to everyone, has been an honor to share in a respectful and productive way. Often structured workshops waste a lot of time, and this has been well used. Started meeting with some frustration, but this is not where we are finishing, rather there is transformative energy

Stephen – this has been exciting, and over a 1000 years of experience around the room, and within these 1000 years we see much change, insightful ideas, and ideas to be mined from what has already been produced. Probably as about exciting of a moment since before 1990.

Franklin – We are starting to make progress, a lot of new knowledge being absorbed and looking forward.

Mark – has been quite productive. 1<sup>st</sup> day reiterated many of the frustration, but day two has been very productive and helping to move things forward. 3 areas that are timely (many more things are interesting, but these are three areas of social relations and policy that have moved in recent years and where DRR/M has something to contribute): 1. Thru existing evidence and practice find transformative systems (provoked to collapse), 2. Learning paradigm is central, 3. Rethinking citizenship and relationship b/n state and private business/individuals through risk lens.

Kamal – Characterize last two days as refreshing and a good chance to reflect. Agree with previous points. For UNDP a very good time to support this process. Risk and resilience issues are now front and center and this helps inform the topic for UNDP. How the national systems have provided impetus for transformation.

Alvaro – thanks for supporting this and for everyone that participated in evening's functions.

Alonso – thinking as a GAR user, some things I would like to see in the next report: 1. would like to see hypothesis of what we as a community have been doing wrong

to give inputs to fit the HFA2 discussion; to use all the GAR experience in a retrospective that inform the debate on HFA2. For new HFA monitor this is especially important, since we need to know better how to measure progress - I think the parameters used by the current HFA monitor are mostly wrong. 2. Need to drill-down on underlying drivers in order to spot processes (such as corruption) and go further on the identification of relevant actors, 3. Endorsement for the conceptual shifts we have been discussing. 4. Blueprint for these liquid approaches that we have to use in varied ways; the report may issue some principles for action that can be implemented into the diverse array of territorial contexts.

Juan Pablo – from FIU perspective, if we can maintain relationship where what we have and use can be shared b/n us and in academic sector. Would be good to have clear link in next GAR on how it builds on previous GAR. Other aspect is how can we match what we are doing day to day with what we have in the GAR. Use GAR and help GAR is a necessary and critical win-win situation. Personally, one thing I envision is regaining human dimension over the physical, engineering focus.

Ilan – Has been so nice not to be so frustrated. I will leave us with a question: regarding human nature, that we converge on shared human values. Do we continue to push against the trend of neoliberalism and consumerism or do we go with it?

Michelle – Really enjoyed first session: We should not look at DRR as a separate discipline, but like DNA that flows into everything. Use of values to identify drivers. Rubik's cube metaphor is extremely valuable. Very happy with conversation of bringing people back into the dialogue more centrally as DRR is everyone's business. This is an important moment, an opportunity we cannot miss, this 2015 development issue and the 15 GAR. This change is due to that we are willing to ask different questions. Hope the GAR can help ask different questions.

Marco – Such a great learning experience over two days went beyond expectation. Involved in two processes where this is highly useful. 1. Management of global platform: DRR and Law- many of these issues help shape and bring conversation forward. 2. Engaged in supporting special rapporteur on UN codification of international law on the topic of protecting people in disaster, and this helps make the case for this report. 3. Very much committed in helping internally as well as related processes to insure GAR is useful and leveraged to the greatest extent.

Pascal – Institutional comment: have learned a lot in last two days. To echo Michelle's point, post 2015 MGDs meeting recently has great contrast with this meeting, and that speaks to the value of this meeting. Format of the meeting helped to think outside the box because we urgently need out of the box thinking at this point. 2015 is an important year as many international processes will converge (HFA, MDGs, SDGs, UNFCCC COP, etc.) . So this is a great time to rattle the cage and let the beast out and perhaps be more forceful without being alarmist. Curiously, risk and disaster is still completely out of SDGs and this is a great opportunity to inject ideas into that discussion.

Johara – Many of us had aha! moments due to how well we worked together and the crosspollination of ideas.

Allan – thank you everyone and I also have learned a lot.

## **ANNEX C: Participant CVs & 2 page overviews**

### **What was requested as a pre-meeting input**

The scoping meeting will be organized as a think tank type seminar bringing together thought leaders from different regions and areas. These thought leaders come from different professional backgrounds, including academia, the UN system, the international development support agencies, NGOs and public and private sectors.

Each thought leader invited to the meeting is asked to pose a set of key questions and challenges to be posited and debated in the seminar. These should be presented in indicative form in a no more than two page summary which should be sent to Lavell and Maskrey at least ten days prior to the meeting (by the 7<sup>th</sup> of April, optimally). The ideas coming out of all participants will then be ordered by the meeting organizers to provide a framework and minimal structure for debate during the meeting.

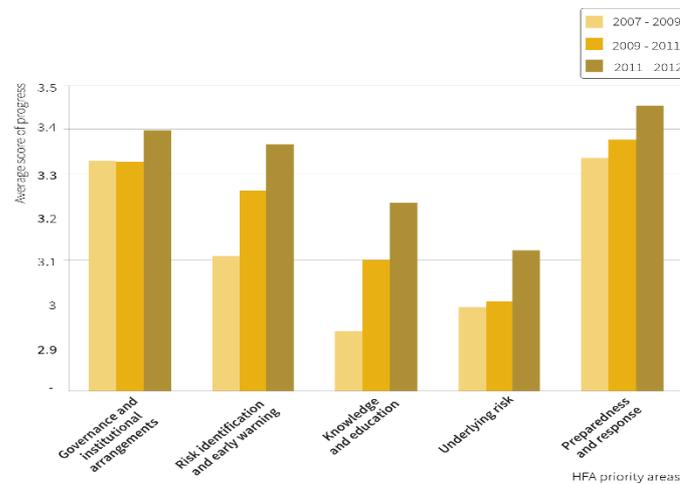
Questions, challenges and needed changes may, amongst other things, relate to the ways risk and disaster are conceptualized and thus approached politically, methodologically and practically; the ways the study and action on risks is enacted; the ways disaster risk is related scientifically and practically to other risks and ongoing development based risk drivers; the ways disaster risk and development problems are dealt with in the educational sphere; the divorce between knowledge and study and action and management. You are of course free to navigate the world of critique and ideas and come up with your own themes. The indicative ideas you develop in the short paper will be brought to the debating table at the meeting

The result of the meeting will be an analytical essay that poses the central questions that emerge from the seminar and its debates. The analytical essay in turn would be used to identify key areas to be covered in GAR15.

### ***Andrew Maskrey***

***Andrew Maskrey*** is currently Chief of the Risk Knowledge Section of the United Nations Office for Disaster Risk Reduction (UNISDR) and coordinator and lead author of the UN Global Assessment Report on Disaster Risk Reduction. Previously he was Chief of the Disaster Reduction Unit of UNDP, General Coordinator of the Network for Social Studies on Disaster Prevention in Latin America (LA RED), Director of the Intermediate Technology Development Group (ITDG) and of the Centre for Disaster Prevention and Studies (PREDES). He began work on disaster risk issues in 1982 when developing a study of earthquake vulnerability of Lima, Peru for the National Institute of Urban Development (INADUR) and has published widely since then in both Spanish and English.

Since 2007, and over three successive periods of progress review, governments report steadily increasing progress in the implementation of the Hyogo Framework of Action (HFA).



Most progress has been made in Priority Areas 1 and 5, indicating improving capacities to prepare for and respond to disasters. There is anecdotal evidence of increased investment in corrective disaster risk management in a number of countries, although few systematically document these investments. And many governments with high levels of economic risk have developed risk-financing schemes, including through insurance pools, catastrophe bonds and contingency financing.

But despite these advances, disaster losses continue to rise. There is evidence that due to improvements in development conditions as well as preparedness and response, mortality risk is trending down. But economic loss is trending up: in countries where national disaster loss databases capture all disasters modelled economic losses have more than tripled over the last 20 years in constant USD terms.

The paradox therefore is that, on the one hand governments are reporting increasing progress in the implementation of the HFA while, at the same time, disaster loss and damage continues to escalate. This implies that while it is important to consider gaps and challenges in the implementation of the HFA it is also necessary to ask whether the HFA itself, if successfully implemented, will actually lead to a sustainable reduction in disaster risks. Addressing this paradox requires reflection on a number of critical issues.

While governments report progress across all five HFA areas, that progress is consistently lower in HFA Priority 4 (Underlying Risk Drivers). **This highlights, that governments have been challenged to factor disaster risk management considerations into urban, economic, territorial and social development.** Badly planned and managed urban development, for example, can generate flooding, through factors such as increased run-off from a growing area of impermeable surfaces, inadequate investment in drainage and water management and the development of low-lying flood prone areas. The decline of regulatory ecosystem services, such as wetlands, aquifers, forests, floodplains and mangroves, exacerbate and magnify hazard levels. Low-income households are often unable to participate in the formal market for land and housing and urbanise

hazard prone areas, through informal mechanisms. Cities and regions with weak governance may either lose control over the above processes or contribute to them.

**This question becomes even more critical, given that all the evidence shows that these underlying risk drivers will accelerate in the coming decades. The reduction of disaster risk will be largely illusory unless these drivers can be addressed.** For example, the urban population of sub-Saharan Africa is expected to grow from 298 million in 2010 to 596 million in 2030 and 1,069 million in 2050. The urban population of India is expected to grow from 379 million in 2010 to 606 million in 2030 and 875 million in 2050. This represents an enormous potential to generate new conditions of disaster risk. Similarly, rising demand for agricultural commodities will place growing strain on both land and water resources. For example, it is expected that by 2021, 107–120 million hectares of new land in sub-Saharan Africa and Latin America will have to be incorporated into agricultural production, much of it in areas which are already water-stressed and which suffer land-degradation. Climate change is also expected to become an increasingly important risk driver in the coming decades.

**Conceptually disasters are still viewed as exogenous events rather than as endogenous indicators of development processes.** Disasters are only manifestations or indicators of these underlying risk drivers. While the HFA focuses on the indicators it does not therefore address the processes. The institutional and legislative arrangements developed to manage disaster risk have largely taken the form of disaster focused organisation and systems. These systems have had little real influence on the development processes highlighted above. Even when policies and laws exist these are often ineffective and do not connect with the reality of development on the ground. **It is necessary to ask therefore whether in the future, efforts should concentrate on further strengthening disaster risk management organisations or systems or whether efforts should focus on the sector ministries and local governments responsible for regulating and promoting development.**

Trillions of dollars of new private and public investment will also pour into the different development sectors in the coming years. Global foreign direct investment (FDI) is projected to reach US\$1.8 trillion in 2013 and US\$1.9 trillion in 2014. In 2011, 46 percent of this investment went into manufacturing and another 40 percent into services, including infrastructure. And approximately US\$777 billion or half of all FDI flowed into low and middle-income countries. **Whether or not these trillions of dollars of FDI as well as the even larger sums of new domestic investment flow into hazard-exposed areas and how the resulting disaster risks are managed will have a decisive impact on the future of disaster risk.**

At present there are only weak economic and political imperatives for both government and business to make risk sensitive investments. However, in a broader sense these investment choices reflect broader societal and underlying values. Investment over the last 40 years has been driven and valued on the basis of short-term gains and a broader externalisation of the resulting risks: climate change being perhaps the ultimate example of externalised risk. There is evidence of a gradual change in those underlying values, catalysed by the global

crisis that was precipitated in 2007-2008. **Some businesses and governments and now discovering that investing to manage and reduce risks can be a compelling value proposition, which in turn reflects a growing societal demand for values such as security, equity and environmental health. If this trend, which builds on values that began to emerge in the 1960s, expands the private sector may become the principal driver of disaster risk reduction.**

However, at the same time it is likely that billions of people in uncompetitive countries which are not successful economically and which do not attract investment, will face increasingly constrained choices to address their basic needs. As the space to choose becomes further constrained, many households and communities will not be able to adopt risk-averse behaviour or a *culture of prevention* but on the contrary are likely to have to run even greater risks in order to survive. **It is also therefore necessary to question the meaning of disaster risk reduction not only in those contexts where risk is a product of badly planned and managed development but also in contexts where risk reflects an inability to access the minimum assets required for development and where governance capacities are the weakest.**

### ***Allan Lavell***

*Allan Lavell is a research associate at the Secretariat General's Office of FLACSO in San Jose, Costa Rica where he has worked since 1991. He has a doctorate in Geography from the LSE, is a specialist in urban and regional development and has worked on disaster risk concepts and practice for the last 25 years. He has published widely, undertaken more than 60 international consultancies and given conferences in 36 different countries in five continents. He was a founding member of the Latin American Network for the Social Study of Disaster Prevention-LA RED.*

I will concentrate on conceptual, notional, contextual and perceptive issues and the need for a rethinking and reworking of many of the basic ways the topic of disaster risk is transmitted, discussed and included in the public, private, civil society and educational-cultural agenda.

Let us first lay out a number of basic premises and then from these derive a number of needed actions required to lay the ground work for more concerted and coordinated action.

Firstly, disaster risk is predominantly and most significantly a result of mal development and a basic and most significant indicator of economic, social and environmental unsustainability. Essentially we know more than sufficient about how it is constructed in order to be able to identify what is fundamentally required in order to diminish or control it (if not always the sequence of things to be done, the concatenated nature of these and the governance conditions that will support them).

Secondly, while certain approaches to understanding of risk have been critiqued because they concentrate on malaise and on an end product-disaster- and not on process and complexity-risk- many have in fact kept their focus primarily on the

malaise side of the risk equation and not on the opportunity side. That is to say, disaster risk is seen as potential damage and loss, not as opportunity and earnings-economic, social or political. And, disaster is also seen mostly as loss and damage and not as opportunity. A political science view of risk and disaster is substituted for by an automated numerical view of loss and damage.

This of course is natural from a disaster risk management angle but unnatural when looked at from the angle of an understanding the process of risk construction. As was achieved with the very simple but illustrative concept of the hazard to resource continuum developed by Burton etc. in the 70s, we have as yet not taken full advantage of or developed conceptual models that see risk as much as opportunity as disadvantage; that see risk as a continuum both qualitatively and temporally that signifies gain for many.

Most explanations of why people and things are located where they are under existing risk conditions, and why they persist in staying there even if the evidence suggests they are at great risk, may be explained by the advantages they gain from being there or by the fact they simply can't change. A real understanding of disaster risk and its process of construction can only be achieved if risk is seen as a derived result of development processes (or rather economic growth) and not as a result of autonomous risk generating processes as such where the growth advantages may almost automatically mean risk. That is to say, risk is derived from mal development when seen from a collective or community angle, but good or necessary economy in an individual or corporate sense. Moving from the individual level to the collective and social level is a key aspect which points us to the apparent contradiction between individual accumulation of wealth and the collective suffering associated with risk and disaster.

Thirdly, despite its obvious derived nature, a result of diverse social and economic processes, many times supported by policy and politics, the general approach has been to construct the disaster risk management problem as a separate problem with its own institutional structures and social and economic rationale, as opposed to seeing it as a context with causal processes that are linked to and derived from other fundamental social and economic processes-poverty, capital accumulation, competitiveness and location, corruption etc. This has led to the completely aberrant situation where we talk of "mainstreaming disaster reduction into development" instead of accepting that development can only be defined if DRR is part of it from the beginning (as is the case with environment and gender also). Thus DRR is many times seen as a means of improving development but not essentially defining it. This has also helped foster a forgetfulness or ignorance of the fact that disaster risk may be a "natural" part of certain economic processes and parameters and only with a thorough understanding of their logic could we hope to rationalise and eventually diminish the disaster risk attendant on these processes.

Fourthly, continued conceptual and semantic in-definition or imprecision combined with physicalist distractions have diverted attention from the essence of the problem and the essence of causality, with severe repercussions as regards a common understanding of the problem and its roots. This can be seen for example in the still common use of "natural" disasters as a descriptor, in the use of phrases like "direct disaster impacts" when referring to economic and life loss

(as opposed to hazard or event impacts, the disaster in fact being those “direct impacts”), and with the rebirth of dominant worries about “extreme events” as opposed to extreme impacts (propagated once more by the climate change scene) and concern for the continuum of small and medium scale events that can be associated with significant and growing loss.

Fifthly, exceptionality as opposed to a continuum between daily life and extremity still prevails as a basic idea for understanding disaster and disaster risk. A worry for disaster or risk reduction still prevails over a worry for the very processes of risk construction itself and the development nexus. Disaster risk is separated from other risks as if it had its own causal process.

Sixthly. Many still believe that concept is unnecessary and what is needed is action on the ground.

Seventhly, status quo and vested interest, political expediency and convenience, derived benefits and resistance to change and the now well established practice of subdividing the world to make it manageable have offered resistances to change and the re-elaboration of ideas and mechanisms in an holistic fashion.

SO if all of these premises are correct what is the way forward?

Firstly conceptual re-elaboration or reaffirmation on multiple levels.

Secondly the acceptance and promotion of notions of continuity and continuum, holism and integration.

Thirdly, the de-autonomization of DRR as a theme and its insertion in the centre of development debate and definition. This also means re-elaborating the arguments and reasons for, and the statistics and analysis we use to support arguments for DRM. Simple risk analysis as we know it is not enough—the clear antidevelopment and anti-economic rationale of disasters must be brought forward to stake holders from public, private and civil society sectors who most probably still see the benefits of risk creation and not the disadvantages. We have to piggy back disaster risk concerns and arguments on more essential and central concerns for production, productivity, social justice, social equity, social protection, etc. The acceptance that disaster response and DRR or prospective DRM are different things, although moving along parallel and related paths, must be made forcibly and institutionally.

Fourthly, we must accept that disaster risk will be with us for ever unless fundamental changes are made in the philosophy and concept of development, all formulated in a more participatory and democratic way. Transformation of practice and goals is more about philosophy, ethics, morality, values and politics and governance, than technical expertise-of which a great deal already exists

Fifthly, we could take advantage of the window that climate change opens in order to get greater saliency for DRM as such. The fact that CC is seen as socially induced as opposed to disasters which are “natural”; the ongoing concern for CC concerns as opposed to the sporadic public and press concern for disaster; the future projection of many CC concerns as opposed to the still reactive and corrective concerns of much DRM action, will all help transformation if we are able to break down the division between both “practices” and holistically incorporate one in

the other and both, fundamentally, in development concerns and practice, taking up on a vulnerability based paradigm and getting rid of the over concern and emphasis on extreme events or physical hazards as such. It should be clear and emphatically stated that DRM and DRR are social pursuits and the only things we can do when faced with physical hazard based risk is changing the social parameters of action and practice.

### ***Johara Bellali***

*Johara Bellali is a land & water engineer with a master in management who has lived and worked in Africa, Asia and Latin America. She has coordinated global assessment programmes in about 30 countries, cities and regions and developed adaptation solutions with emerging governments. Johara has also worked in the heart of Tsunami and Horn of Africa crisis responses, and with marginalised groups in India, DR Congo, Kenya, Guatemala and Vietnam. She has published papers on e-governance, drought risk reduction and climate knowledge. Johara currently works for Save the Children and lives in Nairobi, Kenya with her two daughters.*

#### NEEDED CHANGE

- Marketing is a profound and efficient tool to create value and need. Currently, it's use and the value it creates is for consumption. Would investing in marketing tools to change the rules of the game, the shared value, be a leverage?
- How can the current development pathway for developing countries be supported so that it doesn't replicate the mistakes of OECD countries including creating new risks for itself and globally? What role can new governance systems (IT based?), new ways of setting the rule by a broader people's voice, play?
- How can we harness the Mayors voices, the Resilient Cities movement and create a strong meso-level (local authorities) voice to tackle DRR solutions?
- There is a proliferation of cheap bad quality goods littering the streets of countries with not much choice. These create direct risks (Haiti drainage canals creating massive floods) and indirect risks (transboundary impacts of energy use and waste). Poor buy cheap, and rich have no qualms about providing them with cheap. Designers and producers have a big role to play in reversing the mass production and transport of cheap stuff.
- Can jobs be created only through economic growth or are alternatives discussed? The model of economic growth as applied in developing countries, increases risk factors, and destroys natural and social capital.

- Chemical dumps, and using Africa as dumping sites for highly toxic waste create risks, and long term impacts (eg, ivory coast tragedy) – technological risks need to feature in the DRR discussions.

## CHALLENGES

- Big solutions, quick fixes – the model of our investments and monitoring indicators are linked to big projects using people, land and water indiscriminately. (eg. massive solar farms in the Sahara for Europe, massive mono-cropped farms in Africa for the rest of the world). How can we decentralise the use of land, water, energy, it's management and it's control for more efficient and equitable resource management?
- New demographics of education create a bigger mass of people that have less access to quality education. The trend of global “education” and knowledge is going downhill. There are less babies born in the north where access to quality education is available, and high population growth in developing countries – the trend is worrying. The education gap will have repercussions on worldviews, policies, decisions and fundamentalism. Are we going backwards?

....and:

- How can a more transparent tax systems reallocation in developing countries be tapped for prevention and preparedness to disaster risks?
- How can the financial drive of “taking risk” (equalling more profit) be tapped to “manage risks”?
- How can we prepare children, youth, people to act in advance for the global and local changes that are increasingly affecting them?
- As we are entering a new phase (anthroposphere/technosphere) in which our human activities actually impact the worlds systems, how can technological “quick fixes” to disaster risks and climate trends, with lasting impacts, be discouraged? And transgenerational and transboundary impacts be accounted for?
- Is there a new form of intelligence being created, with certain parts of our brains being under-stimulated and new ways of finding solutions through our Global IT expanded? What does it mean in the way we perceive our role in society, and can we harness that for bringing risk reduction a level down to more operationalization and accountability?

## ***Stephen Bender***

***Stephen Otto Bender.*** Architect and planner served as a staff member of the Organization of American States, Department of Sustainable Development (and its predecessors). With specialization in natural hazard risk management,

*environmental management, and social and economic infrastructure development, he has also served in various teaching positions in the Americas and as a consultant to international organizations. He holds Bachelor and Masters degrees in Architecture and Urban Design from the University of Notre Dame and Rice University.*

### **1. Disasters and Development: addressing conceptualization**

The development – disaster risk management (DRM) linkage has been shaped over the last 25 years by:

- Deliberate policies and practices that have isolated the industrialized, emerging global economy and lesser developed countries' development agenda from dealing directly with risk to natural hazard event.
- Intentional actions with national follow-through have forged the creation of a theory and practice of DRM alongside other crosscutting issues which is tangential to development.
- Likewise, similar actors have acted to merge DRM and emergency management (EM) in order to create a sector by and for specialists.
- These actions have created competition for resources to address risk, including that posed by climate change (temporary and permanent).

In many countries around the world the rate of economic and social infrastructure growth turns out to represent an ever increasing share of the infrastructure exposed to risk. This issue is directly related to the global economy and its markets, natural resource transformation for consumption, import and export activities, the concentration of population centers in coastal areas, and the development of uncontrolled and unsustainable human settlements.

The conundrum is straight forward. Calls for societies to use development as a tool - actually as the principle tool - for managing risk to natural hazard events are not new. Practice, knowledge and policy - in that descending order - have made in some instances direct contributions to reducing risk depending on the hazard type, population and built environment segment, and acceptable risk level. But overall, development patterns continue to increase the vulnerability of populations and their built environments as well as contributing to the actual structure and action of natural hazard event impact.

Sovereign states, multilateral development banks (MDBs), NGOs and the international development community (IDC) should collaborate and shift paradigms to:

- Use all development actions to recognize, review and reduce risk;
- Separate EM policy and operations from DRM while establishing an EM presence in every sector;
- Fold DRM and CCA into development planning and lending practices;
- Promote hazard, vulnerability and risk information as a free, public good; and

- Insist on accountability and responsibility to natural hazard risk all along the development continuum.

## **2. Natural Hazard Risk and Drivers: actors and actions**

Sovereign states, MDBs, NGOs and the IDC define, shape and operate in the fields of DRM, EM and disaster recovery in all their manifestations as well as in all subject matter and phases of development. As such, these groups are common stakeholders in cooperating as well as in the competing spheres of influence, action and reaction. These groups know to a very great extent who is vulnerable and why, what can be done about it, and who pays and who benefits from their policies, and how their policies in the context of this knowledge affect practice. Lack of resilience is not often the product of chance.

From a development perspective, apparently GDP growth for upwardly mobile national economies with strong and weak participatory democracies alike is a predictor if not an indicator of increasing disaster risk. It is also a predictor of a widening gap between not only the rich and the poor, the vulnerable and the safe, but also of disaster losses and investment in resilience. It is becoming more and more visible that the greater the GDP growth, the greater the exposure of the society's built environment to natural hazard risk.

The key aspects of the type and extent of increasing vulnerability of the built environment present in many countries after almost 50 years of international development and disaster management assistance are the following:

- Increasing damage and destruction of social and economic infrastructure including lifelines,
- Relatively few changes to zoning laws and building codes to increase the resilience,
- Fierce opposition from the private segment of all sectors to increased requirements for resilience,
- Continued encroachment of the built environment and ag-industry operations in known hazard-prone areas, and
- Failures to prepare, enact, regulate and enforce land use planning and environmental management guidance, master plans, zoning regulations and building codes.

## **3. Gaps (the divorce) between Development and Disasters: deliberate actions and deliberate outcomes**

Gaps between development and disasters are not necessarily manifestations of arrogance, ignorance, disregard, misunderstanding, avoidance, malfeasance, errors or omissions. They can be deliberate manifestations of competing claims by groups in society using government and economic development to achieve parochial ends. Knowledge, policy and practice individually may provide a society with the wherewithal to take action to manage risk and respond to an emergency. But there are no assurances that in any given instance any or all three of these

elements are positioned to effectively deal with disaster reduction. This is increasingly visible in societies distinguished by their evolving participatory democracies and free market economies. Whether or not these two are the most desirable, enduring or endearing forms of government and economic organization, they are the contexts of most of what gives shape to knowledge, policy and practice regarding development, disasters and risk around the globe.

#### **4. Risk and Development in the Educational Sphere: identity and dialogue**

Societies, particularly those in the throes of dealing with being a sovereign state, need to know much more about natural hazard risk and their society over the past six decades in terms of time and space in relation to physical character, built environment-related economic and social relations, and culture. Those nation states in the throes of a representative democracy, whose society is governed by laws that protect not only the rights of individual citizens but also the broader population, must constantly identify and discuss what to do, especially for the poor. Those countries in the throes of a free market economy whose presence and power strives towards maximizing gains with minimal expenditure of capital must constantly identify and discuss who will pay, how, when and why for the losses that are the result of economic development.

#### **5. Who Knows and Who Can Tell: addressing the actors**

All involved disciplines and sectors can and must develop data bases – hazard, vulnerability, risk and losses - to make manifest risk DRM in the context of development. Authorities whether in the public or private sector who own and/or operate vulnerable social and economic infrastructure of any sector at any scale must bear the responsibility and accountability of dealing with such risk.

#### **6. The Ways Study and Action on Risk Are Enacted: a way forward**

- The theory and practice of development should lay completely aside the paradigms of the “disaster cycle” and the “window of opportunity following a disaster,” and adhere to continual risk reduction through development with the poor as the primary beneficiary, which is essential for the attainment of the MDGs. While societies speak truth to power, risk reduction actions for the poor must speak justice to truth.
- The polemic of DRM or CCA as the priority in development-based risk management should be laid aside in favor of economic and social development-led risk reduction to all manner of natural hazard events.
- The work of society through government and other societal mechanisms (such as private sector risk assessment and risk transfer mechanisms) is to make visible risk and to charge and hold accountable the owners and operators of economic and social infrastructure, whether public or private, for risk reduction to natural hazard events.

In the past when faced with a different type of risk but of the dimensions noted above, that is when faced with the threat of nuclear war and the almost certain annihilation of all societies, the risk management response of sovereign states was a strategy called MAD – mutually assured destruction. Now a risk faced around the globe is again generated by human action – put simply, development-induced vulnerability to natural hazard events. But this time the risk ought to be managed by an acceptable collective strategy entitled MAS, mutually assured survival.

### ***Alonso Brenes***

*Alonso Brenes has a Masters in Geography from the University of Costa Rica. Researcher at the Latin American Faculty of Social Sciences and consultant on disaster risk and territorial development for institutions such as the World Bank, IADB, CEPREDENAC, CDKN, IUCN. During the last ten years he has been involved with projects in Central America and the Caribbean, mostly focused on disaster risk reduction, climate change adaptation, and trans-boundary cooperation.*

#### **Constraints and fictions holding back disaster risk reduction. Cathartic thoughts on the future challenges.**

Safety as a notion can be seen as an outcome of what has been called a "bourgeois moral", which is promoted since the 18th century and nowadays is at the core of the ideal of development. In this framework, societies are invited to reduce its risk to the minimum, seek security at any cost and rely on different institutions for protection from what may be potentially hazardous circumstances. In consequence, taking risks is an exotic attitude, heroes are replaced by anti-heroes and being quiet is a safer bet than speaking out loud. These new codes transcend the sphere of the private life, and also can be identified in our collective activities: politics, financial and economic strategies and, in general, in many aspects of our everyday life as citizens, despite how fictional this logic may be in the real world.

Seeking for a safer life, "anything-proof" is, in the end, a decision based on the individual and collective vision of life, death and well-being; it is not the intention of this short piece to raise judgment on this matter. Instead, the emphasis is placed on how risk is an inevitable condition for human societies and how it can be addressed with a certain degree of realism.

Risk is a good thing. It is also an inherent condition of human nature. When people trace some of the major leaps in human history, they can see risk, as a notion and condition, playing a substantial role in the motivations and the strategies for improving the relation between society and environment. In order to keep growing as a society, we need to defy and redefine this agoraphobic idea of safety and get out from our comfort zone: take more risks, not less.

But risk is a good thing only when the people that face it are fully aware of it, conscious of it and willing to deal with it in order to gain something in exchange (not necessarily money). However, among the different historical contexts, this match between those who create risk and those who face it is not always certified.

And here is where disaster risk reduction should be playing a more decisive role: helping those who do not have the voice, the power or resources to distance themselves from a risk scenario in which they have been forced to live, despite the fact they are not responsible for its construction. So the charm of current disaster risk construction, is the fact that it gives us the opportunity for constructing risk without taking proper responsibility for it. The morals of the coward at the core of our societies.

Great improvements have been made regarding the notion of disaster risk reduction around the world and especially in Latin America. Technical capabilities have been reinforced, a sophisticated conceptual framework has been developed and multi-level and multi-sectoral policies have been approved; however the impacts of all these remain modest. And as we go farther into the understanding of how risk functions, it is clearer that the technical dimension is secondary and the political and ethical dimensions grow in importance. In the same way that the main explanation for disaster is not on the natural dynamics, the key for reducing risk does not depend on technical procedures.

Considering the moral, ethical and political drivers of disaster risk, we can identify three challenges that should be addressed more keenly in the future.

1. Ease off the expectations that relate to scientific development. Science's role is crucial but it is futile when is not supported by political and collectives actions. Of course knowing the risk is important for designing action plans and so forth, but the actual *frenesi* for the data and the modeling is making us lose perspective as regards the root conditions for action, such as common sense. In some territorial contexts, especially at the local level, Science and Technique are working against Sustainable Development, since everything must now be supported by data that would be impossible to acquire in the short term, posing a problem (or giving the perfect excuse for inaction) for decision makers and stakeholders. Climate change fogs the subject and uncertainty has been revamped and expanded to every sector of the Development agenda. How much information is enough? How long is it prudent to wait before taking action? What kind of epiphany are we waiting to obtain from our technical stock that won't be delivered by common sense and the fostering of the basis of sustainable development?

2. To spot the blame. Impunity is consubstantial to disaster risk construction. At least in many countries in Latin America, collectivities keep creating risk in the absence of regulatory mechanisms not only from the Government but also from society itself, that are able to control and cut out stimulus to certain activities that generate risk. In this regard, governance is a paramount topic, and the lack of it a wall to tear down. A substantial effort must be made, not only from the "sector" of disaster risk reduction, but from a common initiative, strategy or programs to help the governments, especially the local ones, to create effective mechanisms for identifying those responsible for the creation of disaster risk and for developing the proper tools to support its job as regulators. Putting the light on the actors and dynamics that produce risk also requires special support for democratic processes in which citizens can be taken into

account, where they can count with the support of institutions, legislation and participatory forums.

3. Disaster risk reduction should be a means, not a purpose. Disaster risk reduction is an argument that shows particular aspects of the wrong ways in which society understands Development. Its central argument, "risk is an externality of Development" sets the field of action and promotes a strong interaction, coordination and cooperation between all the different sectors of Development (this applies for governmental agencies, NGO and multilateral institutions). Future efforts at disaster risk reduction should be formulated based on these three principles in order to start the road to a vanishing of "the sector" into the pillars of Development, considering the political priorities and a willingness to get involved with non-traditional actors.

### ***Pascal Girot***

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#### **Current Challenges: The Political Economy of Disaster Risk**

There is a divergence in trends of disaster related mortality and economic loss, but doesn't this reveal the effective divorce between society and the market economy, and between development on the one hand and sustainability or environmental stewardship on the other.

While runaway exposure of assets and people continues to increase, the economic costs of disasters are on the rise. But while mortality related to disasters has been reduced thanks to government emergency response measures, there are still many social and environmental losses that are still unaccounted for. There is a need to analyze in greater depth the political economy of disaster risk, as there are winners and losers in most disaster. There are also in any given society groups that are risk takers while other are risk bearers. For as we look more closely to the way in which development produces wealth independently from risk conditions, and assets gain in value often in spite of contributing to the politics of endangerment (to quote Ken Hewitt). There are public goods both global (like the atmosphere) and local (wetlands, or river basins) that also bear the brunt of unsustainable development decisions, and often healthy ecosystems provide goods and services which are critical to urban and rural livelihoods. For every value chain, which transforms ecosystems into natural resources in order to produce income and development, there is also a chain of losses which span the

tragedy of the global commons to local livelihoods lost to encroaching deserts or shifting floodplains.

Just as the valuation of ecosystem services has enabled to at least make visible the contribution of nature to development. How then to rethink the current development model that continues to put things and assets above human lives and human wellbeing. This entails, as the document “Another Future is Possible” suggests, disabling the current accumulation of material wealth and the myth of development and unfettered growth. For this to happen, there is a need to reflect more accurately the true costs of disaster losses, which is either borne by government spending for relief and reconstruction, or directly borne by the most vulnerable segments of society. Several countries are now using disaster risk analysis as an evaluation criteria for public investments. On the other hand, disasters also produce opportunities for development, as lost assets are most often replaced, rebuilt or transformed into other rent seeking opportunities. Many local and national economies have been set to gain from post disaster recovery efforts, as they often mean the direct transfer of resources into depressed and vulnerable local economies, they also often signify rent capture for local and national elites who are most often well positioned to gain from large reconstruction contracts and concessions. Similarly, there should be ways of taxing post disaster gains, when these respond to perverse incentives and build future risk.

## EMERGING QUESTIONS

How then to link more effectively disaster loss with the capital gains associated with economic decisions that build assets and transform resources while building risk, or transferring risk to different social groups, territories and ecosystems?

Why aren't disaster losses internalized through adequate fiscal and other public finance mechanisms, in order to truly reflect the cost of risky-prone development?

How can we index disaster losses and post disaster recovery related booms in a way that also counteracts these perverse incentives to continue building risk?

### Future Challenges: The Political Ecology of Disaster Risk and Climate Change

Climate change could add to this mix a measure of greater uncertainty and will exacerbate existing trends in risk, as climate related hazards will most likely increase in magnitude and frequency. But climate change is of all the emerging hazards, perhaps one that is closest linked to the current economic model based on runaway emissions, subsidized energy costs and undervalued services provided by Nature (as the atmosphere serves as a sink for GHG). As with disaster risk, under climate change there are winners and losers, and those countries and communities most exposed to emerging climate risks are those least responsible for causing climate change in the first place. Increasingly, those who are bearing the brunt of these impacts are primarily poor and marginalised people in developing countries, whose lifestyles and consumption patterns do not cause the greenhouse gas emissions that have led to global warming. Many poor communities worldwide who rely on ecosystems for shelter, agriculture, forestry and fisheries are seeing their assets eroded by extreme climate events, sea-level rise and other climate related hazards.

The lack of action in recent decades on both mitigation and adaptation makes severe climate change impacts inevitable. And as negotiations under the UNFCCC reflect a stalemate and a policy of denial, the ever more remote possibility of reaching binding agreement with targets for emissions reduction means that we have to brace for a world that is 4o to 6o warmer. This will mean in the short term an increase in resources in the name of adaptation, and beyond adaptation we need to consider scenarios of massive loss and damage which go beyond any realistic economic provision or ODA.

As Ulrich Beck states, climate change is also a reflection of a crisis of modernity and marks the emergence of wholly fabricated risks. As he well puts it “ *La dinámica de la sociedad del riesgo no consiste tanto en asumir que en el futuro tendremos que vivir en un mundo lleno de riesgos inexistentes hasta hoy, como en asumir que tendremos que vivir en un mundo que deberá decidir su futuro en una condiciones de inseguridad que él mismo habrá producido y fabricado.*” Thus much of the debate around whether or not there will be sufficient resources made available for the Green Climate Fund become irrelevant when, as Beck also points out, it amounts “ *to receiving money in exchange for destruction*”. If managing current risk already poses a considerable challenge,

There are however clear opportunities for building on the experience gained by the disaster risk management community to influence the way adaptation is conceived and practiced, as prospective disaster risk management. Much could be gained indeed in terms of addressing the underlying drivers of risk and not focussing solely on the increase in the severity of climate hazards. We need to scale-up risk governance schemes and build on successful experiences in disaster risk reduction at the local level, in order to increase resilience and adaptive capacities to face future climate risks.

## QUESTIONS

How will climate change affect the capacity of critical ecosystems to provide goods and services, including those linked to regulation, provision and protection against weather related hazards? How can the discussion on valuation of ecosystem services go beyond the simple provision of goods, to consider them less as expendable resources than as common life support systems, bound by biospheric limits and shared by all countries?

How can the discussion on the Post 2015 Sustainable Development Goals constitute an opportunity to rethink the way we address the true costs on unsustainable, a risk prone development? How can the evaluation of current and future risk be taken into account when developing the next generation of Human Development Index? How can the advances achieved by the GAR on modeling for exposure and parametric loss analysis be best used for addressing the risks of climate change?

What is the political ecology of risk governance at the national and local level? How can the current development gains be offset to reflect the true indirect costs of unsustainability and thus abate future risk drivers?. How can ecosystem degradation be accounted for in terms of current and future losses? How will

coastal and high mountain ecosystems bear the accelerated impacts of climate change and continue to provide critical goods and services for development?

What are the emerging chains of losses likely to look like, when sea level rise kicks in, and major ports and cities are paralyzed, as recently experienced in Japan and the US? Who will pay for large scale destruction that is likely to exceed the resilience of even the most robust?

Finally, as Pelling well puts it, resilience can co-exist with fundamentally unjust social contexts. How then can we use adaptation to steer a transition and achieve a transformation in the way we address and govern risk in the world? How can we develop an ethic of disaster risk reduction and resilience? How can local risk governance be best addressed through the transformation of livelihoods and local economies.

### ***Michelle Gyles-McDonnough***

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### **Resilient Nations: Some Key Questions and challenges**

Shocks, both man-made and natural, have happened and will happen again. Helping countries prepare for them helps reduce the impact on people's lives and protects the progress made in development. An overarching priority then is building **resilient communities and nations** that can avoid, reduce, or withstand such shocks. Resilience is about identifying risks, assessing risk and the interrelationships across risks, building scenarios, identifying mitigating measures (prospective, corrective, compensatory), and building response toward sustained recovery.

An important step toward resilience is making risk reduction a priority policy and integrating it into the policy mainstream. The sheer scale of recurrent and probable maximum losses should be enough to shock governments into action, but it does not. The central and still unanswered question remains how to make this happen on a sustained basis.

GAR 2015 should probe this question, recognizing that the scale of losses is broadly understood, numerous strategies and lines of actions have been identified over the years to help reduce disaster risk, institutional arrangements, even if imperfect, exist, and some capacities are in place, with sound recommendations also for addressing gaps at various levels. Looking back over the wealth of information and recommendations provided through the previous three GARs and other sources, what prevents making disaster risk reduction a central policy priority?

- Have we framed the problem correctly, in a way that captures the attention of those with the political authority to set priorities, and take decisions and action? How can we use the post 2015 process and its results to do this?
- Have we aided, through existing methodological and analytical approaches, in placing DRR on the periphery? Reinforced the segmentation of policy action? What should this mean for a post 2015 approach? Should we not do away with separate frameworks, goals and targets and have key targets and indicators of measurement in one instrument (e.g. MDGs/SDGs?) What is the political process to make this a reality?
- Are we doing the right things to build capacity to confront current and future challenges? Do countries have the tools and policies for effective risk reduction across all sectors?
- Can we harmonise international frameworks and requirements for development planning and reporting that prioritise disaster/risk proof development? New financing mechanisms are being developed to address climate variability and change. How are these instruments to be used to promote DRR?
- Political and economic imperatives for DRR remain elusive. How do we generate sustained social demand for risk reduction as a means to enhancing resilience? What is the role of civil society in generating and sustaining social demand? How do we build a civil society movement around DRR as a means to strengthen the link between voter, political authority and action? Do we need to reshape our approaches to information production and sharing?
- How do we advance the relevance and validity of the vulnerability concept as a necessary component of measures of human progress in its multiple, complex dimensions as a means to anchoring DRR in mainstream development frameworks?
- Is it time to revive the vulnerability index to be read along with the HDI as a measure of human progress? How could such a vulnerability index be constructed, taking account of prior efforts?
- Similarly, what scope is there for an independent annual assessment of sensible public investment (national funds and ODA) across all sectors which measures country progress on:
  - Informed targeting of corrective investments
  - Avoidance of loss data
  - Poverty impacts due to increased risk
  - Prospective vs. corrective costs
- How do we assess the quality of democratic governance? Do these assessments prioritise environmental and social governance? E.g., is access to clean water, and safety and welfare being truly prioritised?

## ***Ilan Kelman***

*Ilan Kelman is a researcher at the Center for International Climate and Environmental Research in Oslo, Norway. His main topics of interests are disaster diplomacy, how disasters and disaster risk reduction do and do not create peace, and dealing with disasters in island communities. He also works on climate change, disaster education, safe schools, and post-disaster shelter. He has published extensively and recently coedited the Routledge Handbook of Hazards and Disaster Risk Reduction. He sits on the boards of various disaster risk journals.*

### **Thinking ahead of disaster through P<sup>3</sup>: Principles, Policies, Practices**

Ilan Kelman <http://www.ilankelman.org>

#### **Principles**

##### **1. How can disaster risk reduction ideas and practices be sustained?**

Projects and ideas tend to be short-term: just a few years at maximum. For projects, funding is rarely available for more than three years, even for research. Support to follow up and evaluate work after a few years is almost entirely absent, leaving a gap in our understanding of the effectiveness and continuity of disaster risk reduction interventions. For ideas, paradigms in recent years have shifted from 'rights' to 'human security' to 'transformation', each of which has its own legitimacy and each of which can be critiqued. Yet each one has been presented as entirely new even though the concepts have long existed and even though little has fundamentally changed in their ethos or implementation.

Does the short-term nature of projects and ideas continually inspire and re-engage people and communities in what is effectively the same work? Or does short-termism make it difficult to engage in long-term, continuous, sustained, effective disaster risk reduction?

##### **2. How can disaster risk reduction be connected to day-to-day lives and livelihoods?**

We often state that disaster risk reduction must positively and tangibly impact day-to-day living, such as through improved water, choices, shelter, food, education, and livelihoods. Health and safety interventions—for example, crossing the road, wearing seatbelts, house fires, safe sex, drunk driving, and smoking—are often made to have immediate relevance to individuals. Relevance and knowledge do not always translate into action, but they are a needed beginning.

How can wider disaster risk reduction endeavours—for example addressing poverty, volcanoes, injustice, floods, inequity, avalanches, and disease (although preferably focusing on vulnerabilities rather than hazards)—be made to have immediate relevance to daily lives and livelihoods?

## **Policies**

### 3. To what extent should disaster risk reduction engage with religion?

A large proportion of the world's population attends regular religious services which include a spiritual leader giving a speech and, often, private guidance. Could the talks and guidance regularly include advice and obligations related to disaster risk reduction? One challenge is that an obvious reason might not exist for many religious leaders to become involved in systematically tackling disasters, especially in circumstances where part of the leaders' appeal is the power which they claim to have over nature or where calamity is interpreted as retribution. Yet community engagement means accepting, at some level, community beliefs and cultures—including religion.

What roles could religion and religious leaders play and not play for disaster risk reduction?

### 4. How could different hazards be placed in context to focus on an all-vulnerabilities approach?

After a major event, much focus exists on a specific hazard. For instance, despite more than three decades of effort to set up an Indian Ocean tsunami warning system prior to 2004, that warning system was created only after 250,000 people were killed on 26 December 2004. Similarly, climate change as a hazard driver now dominates many disaster and development agendas—even to the extent of academics and policy makers stating that disaster risk reduction should be entirely encompassed by climate change adaptation, thereby forgetting that climate change adaptation, by definition, does not deal with earthquakes, volcanoes, or tsunamis.

No hazard, including climate change, should be neglected. But no hazard, including climate change, should dominate disaster risk reduction. Instead, the focus of policies should be recognising that vulnerabilities are often similar across multiple hazards. Consequently, if vulnerabilities are addressed, then disaster risk reduction can be effected for many hazards simultaneously—even to the extent that some hazards might become less hazardous.

Without entirely dismissing hazard characteristics, since disaster risk is a function of hazard and vulnerability, how can we shift from an all-hazards or hazard-dominated approach to an all-vulnerabilities approach for disaster risk reduction?

## **Practices**

### 5. How could we better use sports and performing arts to effect disaster risk reduction?

In addition to religion (see question 3), two community activities which garner extensive attention and support tend to be professional sports and performing arts, mainly popular films. Films certainly engage with disaster-related themes, but usually in a scientifically inaccurate and unhelpful manner,

such as *Dante's Peak* for volcanoes and *2012* for a generic hazard-based world calamity.

Yet development work has a long history of engaging with sports and performing arts to inspire communities. Sports have most commonly been implemented through games, both board games and online games, with an appropriate and increasing focus on cooperative (rather than competitive) games without any element of luck (such as rolling dice). Performing arts have been used notably through Boal's *Theatre of the Oppressed* and *Forum Theatre*.

How could we continue and improve that work? How should we balance small-scale community-based development with mass spectator, populist approaches such as World Cup football and Hollywood/Bollywood/Nollywood flicks? Notwithstanding Matt Damon's silly promise not to go to the toilet until everyone has access to clean water, the UN and NGOs already use many sports and entertainment celebrities as spokespeople and ambassadors—is that worthwhile?

#### 6. Where is the money for disaster risk reduction?

The world's countries spend more than \$1.5 trillion dollars a year on the military. Approximately \$1 trillion a year disappears from less affluent countries through illegal transfers, mainly to banks in the more affluent countries. Many impressive and comparatively successful disaster risk reduction NGOs lack tens/hundreds of dollars for petrol for their vehicle or toner for their printer. The gap between the money available in general and the money spent on disaster risk reduction is notable.

No one claims that money alone will solve disaster problems. But it is a necessary component of investing in the future for immense paybacks. The 2012 U.S. election campaign brought in approximately \$6 billion worth of donations. People have money and are willing to spend it for causes in which they believe or if they think that they can gain from their donation. Disaster risk reduction is a cause to believe in. People gain immensely from implementing disaster risk reduction.

Where is the trillion dollars for disaster risk reduction?

#### ***Kamal Kishore***

***Kamal Kishore*** is Programme Advisor with the Disaster Reduction Team of UNDP Bureau for Crisis Prevention and Recovery. Over the past decade he has supported UNDP Country Offices in more than 15 countries. He has guided the formulation of post-disaster recovery frameworks in eight major international disaster events. Prior to UNDP, Kamal spent six years with the Asian Disaster Preparedness Centre (ADPC) in Thailand where he managed a regional programme on Extreme Climate Events covering Indonesia, Philippines and Vietnam. This was preceded by intensive field experience with TARU where work on post disaster reconstruction and resettlement issues across different states of India afforded him with an avenue to apply his skills as an architect.

Over the last fifteen years, disaster risk reduction issues have come to occupy centre stage in the global development discourse. Increasingly, mainstream development actors as opposed to just the disaster reduction practitioners are engaging with risk issues. However, there continues to be a large gap between rhetoric and reality. The growth rate of risk is far higher than our capacities to reduce and manage risk. Impacts of climate change, globalization and rapid urbanization are adding newer and more intractable dimensions to the problem of risk. While many ingredients of effective disaster risk reduction (e.g. under the HFA) have been identified, and systems have been put in place to track progress in instituting these measures, there appears to be a need to reassess the efficacy of risk reduction as it is conventionally practiced. In looking at the future of disaster risk management beyond 2015, I propose a reflection on following questions (in no particular order):

**Consumption oriented economic growth models and risk:** In much of the developing world, poverty reduction efforts are centered around notions of rapid economic growth. Most economic growth models are based on increased productive capacities and higher levels of consumption both nationally and transnationally. This requires greater (and often unsustainable) exploitation of natural resources and conventional sources of energy. While Rio+20 recognized the need for 'green growth', in practice it has yet to get enough traction with planners in most developing countries. In fact, the discourse on 'green growth' has often highlighted the divisiveness between the developed and developing countries. Clearly, the existing growth models have the potential to overwhelm the planet's carrying capacity that will give rise to a variety of risks including disaster risks. Some of these risks may be hard to model. In such a context, it appears that the conventional disaster risk reduction practices are barely tinkering at the edges rather than addressing the core issues that are driving risk. *Can we find a new language of risk that speaks to development planners in a manner that brings about fundamental change in economic thinking? Can such a discourse afford to remain confined to the notion of disaster risk alone? Or do we need to begin to look at the entire 'risk basket' and the place of disaster risk within that? What implications will it have for policy and action, particularly at the local level?*

**Extractive industries and risk:** This is a corollary of the point made above. At present, in many poor countries of the world ranging from Sierra Leone to Cambodia to Papua New Guinea, extractive industries are driving economic growth. Some of these countries have achieved impressive levels of GDP growth. (e.g. Sierra Leone's GDP grew nearly 20% in 2012). However, the governance of these industries has been far from satisfactory and as a result the human development gains have not been commensurate. To the contrary, in many countries these industries are causing large scale dispossession -- in terms of access to land, natural resources and other means of livelihoods -- for the poor and the marginalized. This has huge implications for poor people's ability to manage the consequences of natural hazards. *Can the problem of disaster risk be addressed in these countries without addressing the political economy of extractive industries? How can the policy discourse around extractive industries be more cognizant of the notion of risk management?*

**Climate and Risk:** The notion of bringing together disaster reduction and climate change adaptation under a risk management framework was proposed more than

a decade ago. The SREX report released last year has provided broader scientific basis for this idea. However, in practice this has barely begun to happen. In contexts (such as SIDS), where the impacts of climate change are already being observed and are projected to be disproportionately high, there is much greater political will to address these issues. However, in contexts where the manifestations of climate change are being (temporarily) offset by other factors such as inter-annual or decadal variability, presence of aerosols in the atmosphere, the case for action seems to be not compelling enough for the policy makers. To the contrary, the level of uncertainty associated with the regional, national and sub-national manifestations of climate change seems to become a rationale for inaction. *In such contexts, do we need to alter the nature of discourse on climate – from climate as a source of risk to climate as a resource? How do we hardwire climate in the business of development?*

**Accountability:** Disasters are no longer considered ‘acts of god’ and disaster risk is now widely recognized to be socially constructed. But it has not led to greater accountability for accumulation of disaster risk. There is some amount of accountability for disaster response and recovery but not enough for the development processes that lead to accumulation of risk. This is a particularly challenging issue. *In many developing countries, a growing and increasingly aspirational middle class is losing faith in the governments’ ability to deliver basic services. In such a context, what would the notion of accountability for disaster risk mean?*

**Inter-disciplinary approaches to risk:** Since the IDNDR, the disaster reduction practice has come a long way. It is no longer an area only for the geoscientists, climatologists and engineers. But then we have created a separate discipline of disaster reduction. The problem of risk is multifaceted. Innovation is not likely to come from a distinct group of disaster risk managers. *How do we foster inter-disciplinary work in this area? What kinds of institutional systems do we need to build to facilitate this? How do we make the most of advancement in new technologies to empower at risk communities to address the problem of disaster risk?*

### ***Franklin McDonald***

***Franklin McDonald*** is a former Earth Scientist with diverse management, leadership and communication skills who has contributed to a variety of strategic, sustainability and capacity building initiatives related to Disaster, Natural Resource, Protected Area, Coastal Zone and Environmental Management; Risk Reduction and Physical Planning. He has had wide and diverse experience in policy and programme design, project management, and resource mobilisation (including finance). He has a keen interest in capacity building which has led to his engagement in mentorship, research, postgraduate and professional development activities in civil society, academia as well as the public and private sectors.

**PRINCIPAL CHALLENGES, QUESTIONS, NEEDED CHANGES, STUMBLING BLOCKS and or OPPORTUNITIES?**

1] Many of the key opinion and decision makers at National; sub national (provincial, municipal, and local jurisdictional levels have yet to develop, implement and institutionalise approaches to Risk (including DRM?). This Resilience improvement gap continues in spite of the increase in our knowledge of hazards, and of societies exposure to a range of impacts. The emergence of (reliable) methodologies, systems, processes and practical toolkits / tools capable of improving resilience has not (yet) led to their optimal “mainstreaming” (my apologies to S Bender for using that term”) in a systemic long term basis..

2] Critical vulnerable private sector, civil society, technical, scientific professional, faith-based, media, youth, trade unions, indigenous and cultural stakeholders and interest groups are unaware of, or not fully engaged in the emerging Risk related knowledge networks. This challenge has persisted in spite of well initiatives such as the IDNDR, HFA, UNISDR and CDM. Many of these externally proposed ‘platforms’ remain “planks” at the sectoral / subnational level and they may need to be organically / genetically budded on to local indigenous systems through innovative initiatives based on investing / stimulating research on past coping capacities available through partnerships with the behavioral / social / anthropological science community (incl business schools)?

3] Risk focussed Knowledge networks (and nodes or focal points) , disaster/emergency management systems (and institutions), incident response capacity etc, still need to be better integrated into (or with) the formal economic, sectoral and physical planning systems. There is also a need to harmonise DRM / DRR strategies with existing / emerging frameworks related to high level global / national / regional aspirations including those promoted by the UN system (such as the MDGs, IPCC - Climate Change, etc).

Repackaging existing scientific / technical material for policy and decision makers at all levels needs to be given higher priority across the LAC region.

4] Linking knowledge, objective forensics and practice is an ongoing challenge made more difficult in LAC due to our history, cultural and linguistic traditions. There are also issues of knowledge opaqueness, media isolation and traditions of secrecy in many of our post colonial elitist dominated systems? Research findings are sometimes transparent only to elite groups (eg scientists, engineers) and an investigative media is still emerging.

Research on the links between Public Safety, Corruption, Transparency, Media practices and Risk may unlock some of the challenges and choke points in this area.

5\ Folklore, myths, cultural expressions, traditional storytelling and songs in the LAC are replete with examples of extreme events and there is some evidence (eg calypsoes about hurricanes) that these may be major or significant conveyors of intergenerational information about past events and RISK.

Are we researching and optimally utilising such cultural channels and cultural icons for DRR / DRM?

(Example of Lovindeer .. VOICES for CLIMATE CHANGE + Ozone Song and Wild Gilbert + Keens Douglas Hurricane JANET stc)

## **Rich Olson**

**Richard S. Olson** is Professor and Director of the Extreme Events Institute at Florida International University. He has more than 40 years of experience in disaster research and event response and has a forthcoming article, "Disasters as Crisis Triggers for National Critical Junctures? The 1976 Guatemala Case," in the journal *Latin American Politics and Societies* 55/2 (Summer 2013).

"The Gorilla in the Room:

The Political Economy of Land Use and Buildings Standards Compliance in Cities"

The majority of property losses and those killed or seriously injured in so-called "natural" disasters in the next three decades in cities around the world will result from the failure of structures that will be found – essentially post-mortem – to have been poorly sited, poorly designed, poorly constructed, and/or poorly maintained given the hazard(s) they faced. While 40 years ago some of the losses were attributable to a lack of knowledge about hazards, vulnerabilities, and consequent risk in many parts of the world, ignorance is no longer a viable defense. Future losses will be overwhelmingly due to communities not having done what the state-of-the-art at the time indicated in the siting, design, construction, and maintenance of buildings. That is, future human and property losses will be about track records of compliance – or more pointedly and problematically, the lack of such compliance track records – with readily available geotechnical, engineering, architectural, and other hazard reduction guidelines or standards. In other words (the gorilla in the room because of its sensitivity), future losses will be about *the political economy of compliance and non-compliance with professional norms, guidelines, and standards*. In a globalized system with massive interdependencies and international disaster assistance requirements, it is time, past time in fact, to clearly identify the causes for often highly differential international and inter-urban compliance levels, because the killer problems in the 21<sup>st</sup> century will be increasingly about accountability for Disaster Risk Reduction questions *not* asked and Disaster Risk Reduction issues *not* placed on agendas.

More specifically we need to address and assess not only the current standards or regulations that guide land use and building design, construction, and maintenance in major cities (the relatively easy part), but also and more importantly, *what land use and building standard and maintenance enforcement or compliance assurance processes or mechanisms exist* (the much more difficult and sensitive part). As a very wise man said a few years ago in one of these meetings, "We don't need more legislation; we just need actual on the ground application of the laws that already exist."

More conceptually, in the classic formulation  $R = H \times E \times V$  (Risk = Hazard(s) x Exposures x Vulnerabilities), we really don't know much about the actual "Risk" in many cities around the world because while we may know their "Hazards" and even their "Exposures," we know very little about their actual "Vulnerabilities"

and the varying concentrations of those vulnerabilities. The stunning human and property losses in the 2010 Haiti earthquake are a prime example of systematic inattention to the creation of vulnerabilities over decades, while the relatively low human losses in the 2010 Chile earthquake indicate the relative opposite.

### ***Lilian Reyes Pando***

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## **Understanding losses in assets as a risk product instead of part of the complex resilience building process**

Considering that the final outcome of the HFA is: “The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries”, we could ask whether risk reduction (reduction of the probability of losses) is the final goal to pursue or is it resilient systems<sup>1</sup>, understanding resilience as the capacity to permanently learn and adjust to overcome or even better, coexist with changing external natural and non-natural conditions sustainably.

If avoiding the generation of losses in assets<sup>2</sup> continues to be the final end that we pursue, the following implications should be considered:

- A. How do we manage risk if the possible assets that we want to preserve never existed (in the case of chronic risk) are destroyed (as in the case of a crisis or disaster scenario) or still don't exist (In the case of future risk)?

Let's link those three possibilities to analyze them in association with definitions of different sorts of risk (Lavell, 2007) and the approach of corrective and prospective risk management.

**Chronic risk**, proposed by Hewitt (1983 y 1996) and highlighted by Lavell, (2003) refers to the notion of the conditions that people face every day as a result of **the lack** of basic rights and human security conditions (Wilches-Chaux, 2006), this is to say: unemployment, lack of income, malnourish, violence, etc. In all cases we are talking about set a of “still not existing assets”.

Corrective risk management should in this case not only avoid the loss of the few assets that the community at risk has barely managed to have, but also pursue the achievement of several others essential for human security. Some would say that that goes under the umbrella of regular development programs, but we could argue that those actions could be better exercised as resilient development management.

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<sup>1</sup> Meaning by systems: communities, institutions, livelihoods etc.

<sup>2</sup> Assets include social, economic, cultural, environmental etc.

Enhancing the idea of focusing in the reduction of losses doesn't necessarily articulate risk management to change and improve communities' life conditions. In fact, this emphasis is forcing that DRR competes for efforts and resources with development actions that try to achieve social wellbeing.

The more we face and understand that extensive risk conditions derive from chronic risk and are a prelude for intensive risk, the more we will need to stop focusing in reducing the probability of losses and erase the limit between development and risk reduction actions. Pursuing resilience as a strategy for sustainable development gives us that opportunity.

On the other hand, secondary risk (Lavell, 2007) contemplates specific conditions that arise slowly or suddenly as a result of the impact of a certain dangerous physical (and I would also say non-physical as in the case of an economic crisis). An example could be conditions of food insecurity, epidemics, basic WASH, education and health services interruption, livelihood depletion, etc. In all cases, assets supposed to be preserved by DRR are gone, and therefore, some would say that the effort to restore minimum human security conditions is outside of the DRR scheme. Most people and institutions may even assume that there is a window of opportunity for building better, but in the meantime consider that risk reduction is not an immediate issue. Humanitarian operations are therefore not perceived as a window of opportunity to build resilience and it is frequently seen as a set of activities completely separated from development and from DRR.

This leads us to reflect on the feasibility of the third strategic goal of HFA:

“The systematic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery programmes” (UNISRD, 2005)

### **Corrective risk management**

In this case as in the first one, we find again a false dilemma or dichotomy, making response initiatives compete with recovery and risk reduction resources.

¿Is emergency preparedness out of the DRR framework or is it a substantial part of it with specificities derived from the fact that it deals with secondary risk?

Disaster and emergency preparedness and response are meant to deal with the aggrieved conditions of structural risk. They are therefore meant to support essential human security conditions but at the same time face the new challenges posed by a slow or sudden change in structural risk. It is also meant to facilitate, or at least not disturb, recovery processes that deal with future risk conditions. Presented as such, we could argue that preparedness and response actions are indeed risk management practices that require the richest combinations of knowledge and resources for corrective and prospective practices (sabers) to build resilience.

This doesn't mean that preparedness and response processes should quit having the sense of urgency and pragmatism needed to save lives without delay; nor should risk analysis or risk prospection fall into a reductionism and over simplification. Factors such as timeframes; extreme vesting conditions (*condiciones*

*extremas de carencia*) and institutional and political constraints that an emergency situation entails, must be carefully analyzed, but it is worth to study the relationship and the trends of the relationship of response efforts and resilience building from a different perspective than the one that currently prevails.

**Future risk (Lavell, 2007) management** takes the worst piece of the pie, considering that in this case we are talking about assets yet and far away to be even imagined. DRR has no chance to anticipate the resilient conditions needed in the future unless a prospective DRR management approach changes the rational and the focus of its actions, from avoiding possible future losses of assets to an approach of enhancing ongoing and continuing resilience building processes.

In terms of resources, under the current interpretation of avoiding losses as the final goal, DRR prospective measures will continue competing with a prevailing longing for economic growth.

### **Conclusions:**

- Emphasizing the reduction of possible losses in assets as the final outcome of DRR opens the path for returning to the thinking that disasters are worth managing only because they produce a decline or elimination of development's outcomes.
- DRR seen as the end by itself can be as distorting as the old paradigm focused exclusively in the disaster response and the disaster reduction.
- The reduction of losses in assets should be a desirable and needed result but not the primary or the only. It would come as a result of resilient development.
- Under the hologramatic principle of complexity, resilience becomes the mean and the goal at the same time. The element in the whole and the whole in the element as Morin (1999) would say.
- Following the logic of the arguments pointed out above, and considering that enormous amounts of resources and efforts are being made in order to enhance preparedness and response to small, medium and large emergencies worldwide. It is worth to study the relationship, the trends and the accountability involved in the relationship of preparedness/response efforts and DRR/building resilience.
- If learning, adjusting and transforming is at the core of resilience building, DRR should be mainly understood as an enabler for information flow, communication, networking innovation, participative research, collective memory and complex thinking. Avoiding losses will be then understood as an output more than as an outcome.
- Messages and messengers related with preparedness and response should be wisely included in resilience building as a significant part of the efforts mentioned above.

***Mark Pelling***

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DRM is at a very specific juncture in its evolution intellectually and as a policy space. Having courted climate change, SREX has articulated something of a common framework that can by implication be extended to non-hydro-meteorological hazard contexts. Climate change adaptation benefits from this close relationship through the public and policy projection of climate change through extremes and their management which make climate change impacts tangible. DRM benefits from greater political profile and scope for intellectual and methodological/technical collaboration and innovation particularly around coping/adaptation and resilience/resistance/transformation. There are though some **dangers for DRM that result from a close interaction with climate change**.

Perhaps the most fundamental concern arises from the seductive quality of the SREX project and associated climate science – the big guns of climate modelling and one can extend this to insurance modelling capacity. Risk is writ large in this world view, it is a matter of large scale events, of catastrophe and overwhelming loss. The combination of a focus on extreme events and of big science methods are important and valuable, but they can address only part of the risk landscape and are in danger of overshadowing or shifting policy and academic scrutiny and thinking away from the development failure that underlies risk – they normalise risk and an externality to be managed, not as a social problem CHOSEN as a PREFERENCE. This is most apparent when contrasting the catastrophe focus of climate change with the ISDR Global Assessment Review argument for extensive risk and everyday disasters – widespread, high frequency and low impact events – that in aggregate cause a greater burden to development (and especially for the poor). At the moment this case is a little quiet, with important consequences for risk management. Big investment continue to be directed towards risk modelling at the global scale (despite Future Earth etc) downplaying the contributions to be had from better understanding and supporting local decision-making, risk perception and action. Academia is a problem here as well with careers made through theoretical innovation and empirical originality, not supporting citizen science and the accumulation of consistent empirical knowledge.

A well expressed and empirically evidenced case is needed to demonstrate the merit of confronting distributed risks and small scale individual losses. This will require international support for decentralised, people-centred risk reduction and is against the flow of science funding which continues to be oriented towards large scale technological and risk modelling approaches. This is the overarching challenge of our moment, and also an opportunity. There is scope here for a paradigm shift, or at least a reclamation - in the way risk and development are perceived, placing risk within development (as has been argued by many but rarely institutionalised). There is a wealth of expertise and knowledge to build on

– from community based risk management to local risk perception studies, action research, knowledge exchange methods etc. Not sexy, in some eyes rather tiered, but without strengthening the argument for local and people centred risk management within development it is difficult to see how the DRM community can avoid being co-opted by the climate change emphasis on large events.

Situated beneath this overarching concern are a number of more specific challenges and opportunities that require attention from contemporary DRM.

First is the emergence of **new geographies of poverty and vulnerability**. Both are increasingly urban and distributed so that it is more difficult than ever to use nation states to describe distributions of poverty or vulnerability. Arguably most of the new vulnerability being generated by development can be found in urban places within middle-income countries. How fit are our observation tools and policy response architecture to go beneath the national level? There may be more progress here in the science than in the policy domain. Donor funding still tends to be sovereign. Reporting to the HFA is sovereign, though networks such as Views from the Frontline (VftF) provide an alternative view. The VftF experiment seems very worthy of close inspection and support.

Second, if the focus of risk reduction is likely to be increasingly urban then this suggests a **shift in the balance of analysis and policy from livelihoods to governance**. Urban vulnerability and more so resilience (with its association with information) is closely tied to local decision-making structures, networks of support, co-option, opposition, resistance etc. There is much to learn from networked community organisations, especially in large Asian cities. These groups, such as the Shack and Slum Dwellers International offer examples of living alternatives to organisation built around local government or private sector led urban development that have both consistently failed to deliver basic services AND self-determination to the poor and less-poor alike. How fit is the DRM community to shift from livelihoods to governance as a framework for understanding risk? The academic community is already there to some extent, the policy community and NGOs have been slow.

Third, and one could argue partly associated to the extreme event/modelling worldview, where policy is constrained by what is quantifiable, are some large holes in our understanding of the ways in which people experience hazards and disaster events. **The need to place greater emphasis on experience rather than direct impact** and loss is good news. This is an outcome of the reduction in mortality achieved in the last decade and more. But the result is a realisation that for many (and again especially perhaps in urban contexts and in middle, and even high-income countries), the immediate impact of a hazard is less defining of a 'disaster' than badly delivered response and reconstruction. The community has for a long time recognised the difficulties of temporary accommodation post-disaster but this has not been systematically studied, there is very little work on the behaviour of insurance systems (state, community and private) or on social support post-disaster. There is even less investment in rigorous study of the emotional and psychological impacts of disaster and of indirect economic costs for individuals and from the perspective of individuals.

Fourth, though here there is intellectual and policy momentum, if still youthful, is the need for a **critical appraisal of resilience**. It is important to examine the deployment of this term in policy discourse and the implications this has for action on the ground. The critique of resilience as conservative, and of adaptation as defensive is now well articulated, SREX even established transformation as a legitimate component of the 'solution space' for responding to extremes. Transformation can signify a paradigm shift in risk management – suggesting there are places where human wellbeing/fulfilment or sustainable development will be better served by allowing (or provoking) the failure of existing systems. Much work is needed to flesh out these claims – both as a radical response to risk and as a more balanced policy option, but nonetheless one that squarely recognises that transformation in many cases will either be forced or chosen in the anthropocene – and argues that determined transformation is preferable even if painful and with its own risks in the short-term.

### ***Aromar Revi***

*Aromar Revi is an international consultant, practitioner and researcher with nearly twenty-five years of inter-disciplinary experience. He is the Director of the Indian Institute of Human Settlements (IIHS) - India's first independent national University to address challenges of urbanisation through an integrated programme of education, research, consulting and advisory services. He has been a senior advisor to various ministries of the Government of India, including the national Planning Commission and consulted with a wide range of multilateral and bilateral development institutions including the World Bank, ADB, UNDP, UN Habitat UNEP, UNU, DFID, SDC, NORAD, CIDA, IDRC, AusAID and number of national and transnational firms. He is a Board member of the World Resources Forum and the IIHS.*

*[no 2 pager on file]*

### ***Sahar Safaie***

**Sahar Safaie** is an independent consultant and recently founded "Sage on Earth" a consulting group focus on solutions for building disaster resilience of nations and communities. Sahar is a native of Iran, holds a masters degree in Earthquake Engineering from the University of British Columbia, Canada and has more than eight years of experience in engineering design, disaster risk management, probabilistic disaster risk modeling and its applications, project management, and product management. Sahar's professional history includes working at Risk Management Solutions (RMS) in California as a product manager of Latin America earthquake risk models. She also worked as a DRM specialist at The World Bank at the Global Facility for Disaster Reduction and Recovery (GFDRR), Latin America and the Caribbean region, and Middle East and North Africa region. She is an active member of Earthquake Engineering Research Institute (EERI) and has been

involved in various earthquake risk reduction initiatives and projects such as The World Housing Encyclopedia, Confined Masonry Construction Network, and the GFDRR- EERI partnership. Sahar has done visits and research of recovery and reconstruction after 2004 Sumatra Tsunami, 2011 Japan Earthquake and Tsunami, 2012 East Azarbaijan Earthquake of Iran, and November 2012 Earthquake in Guatemala.

**Topic 1) Understanding success and failures of enforcement policies for codes and regulations in structural design, construction, physical planning and other parameters of new developments could provide a path forward for one of the most fundamental ways of reducing future risk.**

Background:

It is clear that one of the most cost effective ways to reduce risk in the long term is to avoid the creation of new risks. Indeed, every new house, every new infrastructure element built without consideration for the destructive power of adverse natural events increases the risk portfolio and exposes more people and economic assets to future disaster risks.

The challenge to ensure that appropriate design, construction, and planning techniques are used is daunting. While engineering tools exist to meet this challenge, as do the local expertise and construction materials required for safer buildings, there are complex political, institutional, social and economic factors critical to changing such practices. Lack of enforcement of codes and guidelines are still a major source of economic and life loss especially in developing countries.

Understanding the core reasons of success and failures enforcement policies, political and social incentives for public and private bodies for enforcing and complying with codes and guidelines could guide the international, national, and sub-national entities to address this challenge. Study of successful cases and failed attempts in various countries would provide significant insight.

Questions:

- What would be the incentive for decision makers to prioritize and invest in enforcement of codes and regulations?
- What can be the role of general public for creating the political and economic incentive for the national and local decision makers? (awareness of general public)
- How national government (and which body?) could get incentivized to invest in enforcement of codes?
- How does the political and economic framework, including stability, good governance principles, economic and development level, presence of corruption would influence level of incentives, and success of enforcement programs?
- How does the social and cultural framework, including traditions, perception of disasters, role of engineering and science, experience with capacity building and advocacy for disaster management and/or risk

reduction, political and scientific international relations, would influence success of enforcement programs?

- What would be the role of education level of general public, engineers and scientists, and public sector decision makers in the willingness to enforce and success of enforcement programs?

## **Topic 2) Linking natural disaster risk to existing “financial risk” concepts and concerns to take advantage of the existing global attention to financial risk.**

### Background:

Today, economic and financial risk are more at the spot light and attention of states and private entities. Considering the negative economic impacts of natural hazards with potentially devastating effects on nation’s economy, it would only make sense to include the issue of natural disaster risk into the existing financial risk concepts and concerns. This would be a compliment to the existing financial risk management practice and would provide the natural disaster risk management the stage for attention and action by public and private entities.

### Questions:

- At what threshold, natural disaster risk could be important enough to be included in the state or private sector financial risk profiles?
- What level of risk information is required and is there sufficient information on levels of natural disaster risk to be used in dialogue for inclusion in financial risk profiles?
- Which countries already have the natural disaster risk as part of their sovereign financial risk profile? What was the process?
- What are the best channels / strategies (G20 in 2012, next?) to expand inclusion of natural disaster risk in financial risk profile?

## ***Juan Pablo Sarmiento***

***Juan Pablo Sarmiento*** is Research Professor at the Robert Stempel College of Public Health and Social Work, and at the Latin American and Caribbean Center, College of Arts & Sciences located at Florida International University. He has more than 30 years professional and research experience in the fields of health, health education, risk assessment, and disaster management in Latin America and the Caribbean.

### ***Facing an already built environment***

Despite the advances in the conceptualization of disaster risk management as well as the proposed actions directed toward the inclusion of the topic in the development processes, global society faces challenges of special magnitude that include: (1) the growth of informal urban development, (2) accumulation and

aging of existing infrastructure and building stock, and (3) the impact of global macroeconomic trends.

There is a need to explore how these challenges with unknown dimensions contribute to deepen the processes of risk construction and accumulation. It is essential to understand the dynamics of these processes in order to revisit policy and associated practice, and to explore windows of opportunity and options for intervention.

### ***Informal Urban Development***

What are informal urban settlements or neighborhoods and how extensive are they?

What common governance patterns appear to hold across informal urban settlements?

What risk factors are commonly associated with informal urban settlements?

Is it possible to identify disaster risk reduction good practices in informal settlements?

### ***The Built Environment***

What is nature of the built environment?

How would one measure or assess the existing infrastructure and building stock?

How would one assess the “vulnerability gap” of the existing infrastructure and building stock against the most recent building codes and zoning and land use regulations?

### ***Global Macroeconomic Trends***

To what extent are the new global macroeconomic adjustments and strategies affecting disaster resilience with the obvious decline in public investment, the weakening of social protection systems, increasing sub-employment and unemployment, and the loss of individual savings?

### ***Marco Toscano-Rivalta***

#### **Risk management governance - free considerations on: questions of responsibility, accountability and normative frameworks**

##### *Focus*

This short note focuses on possible future scenarios, challenges and opportunities to address some of the questions related to risk management governance, and, in particular, to institutional questions affecting responsibility, accountability and normative frameworks.

### *Some Assumptions*

The analysis of risk trends has evidenced a gap, possibly widening, between risk generation and risk ownership, and has let emerge the need to reconsider and better assess criteria, assumptions, for the (re)definition of responsibilities across the public and private sectors, and of accountability mechanisms to ensure that those responsibilities can be, and indeed are, discharged.

Current economic and social situation in many countries has generated, and likely will continue to stimulate, reflections on the role of institutions, the allocation of powers and the very same definition of what is “public” versus “private”, and of grey areas which can not be squarely defined in on way or the other. This is coupled with a seeming tendency to expect more from the state or public sphere, in moments of crisis.

Political and social variability, if not in some cases instability, is and continue to reverberate on the functioning of institutions and, more in general, of the three state powers (legislative, judiciary and executive), as articulated at both central and local levels. Some of these effects will affect the capacity to govern of the executives, and the legislative and oversight functions of parliaments and local assemblies, thus conditioning the possibility of sustained, longer-term, coordinated, determined and focused collective action to manage disaster risk. The judiciary is also called upon to decide on increasingly complex questions related to disaster risk management, in often not well defined normative frameworks.

A redefinition of the political, dynamic equilibria between centre and periphery, central administration and local authorities, especially in the case of large cities and metropolitan areas, is ongoing, thus opening more opportunities to effective local action to manage disaster risk.

There will likely be an expansion of freedom in broad sense and thus, in principle, the opening of new opportunities for actions and initiatives by both the public and the private sectors, jointly and independently, which will have the potential to both generate and reduce risk. The tapestry of partnerships will become more multifaceted, if not complex to define from a legal point of view, with also increasing challenges for the determination of responsibilities vis-à-vis risk management. Likely, new instruments will be necessary to manage this.

In many quarters, there is an increasing demand for more explicit norms on disaster risk management. Normative frameworks and mechanisms are and will be increasingly stress-tested in their suitability to tackle emerging challenges and endure the relevance and adequacy test posed by the fast evolving technical and scientific progress and the accumulation of knowledge through practice. In other terms, the question is how normative frameworks can constantly integrate knowledge – as this affects the question of definition and attribution of responsibilities on risk ownership and generation, and the functioning of accountabilities mechanisms. At the same time, demand for, and codification of, more norms will not necessarily make things simpler, as the margins for

alternative interpretations increase, with obvious consequences for the definition of responsibilities and effective functioning of accountability mechanisms.

The ownership of, and leadership on, DRR at institutional levels has been the subject of varying considerations, with a pronounced tendency to see the executive power at central and local levels, and possibly at their highest levels of hierarchy, as the most natural and best place. Whereas this may well reflect the desire for prompt action and clear leadership, at the same time effective action to manage disaster risk can only take place if the three powers operate in synch, transcend conflicts of interests or attributions, act swiftly, integrate developments emerging from practice and science, and mostly are understanding and reflective of the lay man's needs and claims as well as can be easily accessed.

The existing mechanisms at country level to coordinate and generate traction and focus on DRR, including national platforms and HFA focal points where they exist, have still very limited powers and recognition within the institutional frameworks and under the law. And it is unlikely that this will change in the near future. Yet, they have interesting potential – how to unfold them?

### *A hypothesis*

Over the past few decades, governance science has been experimenting in countries characterised by differing forms of state and government and legal systems, the institution of “independent authority”, “*Autorités administratives indépendantes*”, “quango”, or “las autoridades administrativas independientes”, which stands at the crossroad of the three powers and related institutions, and are accessible by any entity with legal personality (people, companies, organizations etc). They operate in many different fields, from consumer protection, to children rights, financial transactions, insurances, telecommunication, anti-trust, etc.

Some of the advantages and characteristics include limited bureaucracy; independence yet establishment and accountability under the law and inclusion in the institutional framework; relative stability and limited influence from political wind changes, which indeed condition the functioning of the legislative and executive; penetrating powers of regulatory and adjudicatory nature; and rapidity in action and capacity to integrate innovations into its working practices. Some of the disadvantages refer to additional administrative elements, and risk of fragmentation and complication of domestic accountability mechanisms, limited scope of action. Yet, overall, they seem to enjoy a certain degree of success.

The question is: could something similar to a national “independent authority on risk management” serve the cause

### ***Gustavo Wilchez-Chaux***

***Gustavo Wilchez-Chaux.*** *Ex alumni of the 1983 Popayan and 1994 Tierradentro earthquakes in Colombia, with a post grad in the Coffee Axis earthquake of 1999. Doctor in Law and Political and Social Sciences from the University of Cauca, Popayan. (1977). Author of the concepts-instruments of Global Vulnerability-1988*

and Territorial Security-2003. Gustavo is the author of more than 30 books, including one of science fiction. He has 6 blogs and was recently voted one of the most influential bloggers in Colombia.

### **OBSTÁCULOS:**

1. La gestión del riesgo, al igual que la gestión ambiental y la adaptación al cambio climático, se siguen mirando como actividades adicionales al desarrollo y no como maneras de entender, planificar, ejecutar, monitorear y evaluar el desarrollo. *La gestión del riesgo es el air bag que se infla cuando hay un choque mientras que los grandes presupuestos del desarrollo (públicos y privados) se siguen invirtiendo en aguardiente pal'chofer.*
2. Como consecuencia de lo anterior, en la práctica la gestión del riesgo se identifica con la capacidad de responder a emergencias y desastres. A nivel internacional y al interior de los países *cada vez somos más exitosos en rescatar naufragos pero cada vez se generan más condiciones para que haya más y más complejos naufragios.*
3. La gestión del riesgo se ha ido volviendo cada vez más tecnocrática y en la medida en que eso sucede, se va alejando más de las experiencias, saberes y expectativas de las comunidades, cuya supervivencia ha dependido siempre de que sean capaces de llevar a cabo una efectiva gestión del riesgo (intuitiva o basada en saberes tradicionales). La gestión del riesgo no está generando autonomía de los actores del territorio sino mayores dependencias. *La gestión ambiental, la gestión del riesgo y la adaptación al cambio deben ser interdisciplinarias en la planificación y ejecución de acciones pero deben ser indisciplinarias en la comprensión de los procesos que generan los riesgos.*
4. El hecho de que la gestión del riesgo, la gestión ambiental, la adaptación al cambio climático y la gestión del desarrollo sostenible se sigan considerando actividades distintas entre sí, indica que no existe una comprensión afortunada de los procesos naturales y antrópicos que interactúan en el planeta Tierra.
5. Muchas palabras han entrado al léxico obligatorio de la política y del desarrollo pero se ha abusado tanto de ellas que se han convertido en *cortinas de humo verde* para ocultar, bajo la etiqueta del desarrollo sostenible, los mismos errores que han conducido a la crisis planetaria y a sus expresiones regionales y locales. Esos conceptos son necesarios e importantes pero deben corresponder a compromisos y prácticas reales.
6. Se suelen generar grandes debates sin sentido práctico alrededor de “dilemas” sobre si es “sostenibilidad” o “sustentabilidad”; “riesgo ecológico” o “riesgo ambiental”; “reubicación” y “reasantamiento”, pero se olvida la esencia de los procesos a que se refieren esas palabras. La inutilidad del debate distrae sobre los problemas reales.

### **OPORTUNIDADES:**

1. La magnitud de la crisis climática con todas sus implicaciones y el incremento de la complejidad de los desastres generados por distintas causas (caso extremo: Fukushima) está obligando a tomar muy en serio la necesidad de armonizar *–por las buenas o por las malas–* el desarrollo con las dinámicas ecosistémicas y sociales de los territorios. El cambio climático es a los ecosistemas lo que el Movimiento de los Indignados es a las comunidades.
2. Están aflorando en el escenario múltiples crisis simultáneas (cambio climático, crisis financiera global, armamentismo nuclear, crisis alimentaria) que exigen respuestas estratégicas a distinto nivel.
3. La gestión del riesgo ha generado herramientas conceptuales, científicas, técnicas y sociales, de gran valor teórico y práctico para la reducción de los riesgos generados por distintas causas y en distintos procesos. Quienes deben tomar decisiones frente a las crisis encuentran a su disposición *cajas de herramientas* generadas por la gestión del riesgo.
4. Enfoques holísticos que antes eran descalificadas como divagaciones “new age” están demostrando su capacidad para entender los sistemas y procesos complejos y para generar respuestas adecuadas para interactuar con ellos.
5. Muchos movimientos sociales que están tomando fuerza en el escenario mundial y en los escenarios nacionales son conscientes de la necesidad de abordar el desarrollo con enfoques distintos a aquellos que han conducido a las múltiples crisis. Esos movimientos encuentran en la gestión del riesgo (entendida como **GRR**: Gestión Radical del Riesgo - Getting Radical with Risk) herramientas útiles para alcanzar ese objetivo.

## **DISASTER RISK REDUCTION IN SEARCH OF NEW LIFE GIVING MYTHS**

Comments by Gustavo Wilches-Chaux

April 23, 2013

“When you realize that eternity is right here now, that it is within your possibility to experience the eternity of your own truth and being, then you grasp the following: That which you are was never born and will never die. . . .” Joseph Campbell

“For the myth is the foundation of life; it is the timeless schema, the pious formula into which life flows when it reproduces its traits out of the unconscious.” **Thomas Mann**

It’s a shame that the Word “myth” is being used as a synonymous of “mistake”, “error”, “ignorance” and “misunderstanding”, when myths, as Thomas Mann said, are “the foundations of life”.

Myths explain the world and, specially, give us a place and function in this world. Myths explain us what we are as parts of a whole.

Capitalism-neoliberalism-free market based happiness is another myth, the predominant one today. One of the ways in which it keeps other myths away from people thoughts, is

calling them “myths”: all what is not what they believe is a “myth”. Theirs is the only truth. The same can be said of communism and of all the monotheistic-anthropocentric myths that give man the role of “Owner and Master” of a Universe created just for human wealth.

Apart from providing a world view and giving us a role in it, myths create spiritual and ethical bonds (yes: capitalism too, according to its interest and beliefs).

If this that we called disaster risk reduction wants to become something deeper than a mere first aid kit to cure the injured by the unstoppable voracity of humans acting under “development” rules,

We have the possibility –and I’ll say: the duty- of seeding a new science based myth, which helps us to understand our role in this evolving Earth of which we are a part. An important and somehow “dominant” one, but just a part. (“Gaia hypothesis” is a good example of a scientific-based life giving myth).

Climate change is creating challenges for life on Earth (including our species and civilization), equivalent to those that appeared when life-created oxygen gas (O<sub>2</sub>) invaded the primitive atmosphere and forced life to redefine itself almost completely. As it is well known, some species hide into clandestinity in oxygen-free environments (today some still exist). Most disappeared. But other species learned how to breathe (adaptation) and how to get the best out of this new gas. They invented respiration and we come from them.

That was possible because Life had billions of years to experiment and can afford that many species get vanished in the experiment. We humans don’t have all that time available and don’t want to be part of the species that will become extinct.

But we have “Culture”, “Will”, “Reason”, “Values”, “Love”, “Commitment”, etc. And we have tools called “Adaptation” and “Risk Management”. Perhaps those tools can help us to face the challenge of surviving with good life quality and with life dignity in this fast changing world.

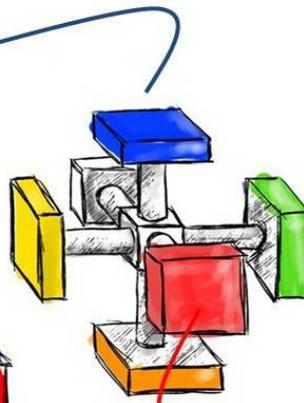
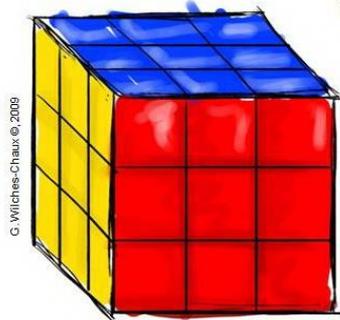
### **Are there “magic words”? Words that can change reality?**

No, but when words are used in the right metaphors, they can change the way we see reality. And when we see and understand reality in new ways, we change and we are better able to change reality.

## “Inamovibles” en la gestión del desarrollo

Por ejemplo:

Todo proyecto debe evaluarse en función de su capacidad para construir seguridad humana y seguridad territorial en el largo plazo.



Ningún proyecto puede afectar la integridad y la biodiversidad de los ecosistemas estratégicos

Todo proyecto debe contribuir a generar condiciones que faciliten el ejercicio real de los Derechos Humanos y en especial de los Derechos de la Infancia y la Adolescencia

I have

been using Rubik's Cube as a metaphor for some years ago. It let me understand that what we do when managing the so called “sustainable development” or when we are “Getting Radical with Risk GRR”, we are helping many complex factors “to get in the right place”. But when one factor reaches that place, all the rest of the cube's pieces move.

If one face is, for example, environmental protection, other is economic growth and other is governability/governance, if we advance one step in “fixing” one of the faces, most probable the other faces will go one step backwards (except if we can create synergies that make more than one face advance at the same time. That is very much possible many times).

In the next step we must do as much as possible to obtain that those dimensions that went back, advance again. That is an example of how values of reciprocity and solidarity can be applied in development and risk management.

While the cube has a “solution” (all six faces with it's color complete) “sustainable development” is a process of permanent adjustment and change, with multiple possible “solutions”, depending from the particularities of each concrete territory (ecosystems x human communities and institutions).

It Rubik's Cube all the pieces move, but sis: those in the very center of each face. They rotate but can't move from their place.

DRR / Adaptation must determine which “pieces” are “inamovibles”: not negotiable principles and values that can't be sacrificed by any development project.

For example:

- Water and its availability for humans can't be sacrificed.
- Integrity and biodiversity of strategic ecosystems can't be reduced or sacrificed
- Conditions that make possible to effectively exert and demand children's rights can't be affected negatively
- Local community capacity to participate in decisions affecting their territories must be guaranteed

The effectiveness of those principles will be higher if they are part of our commitment to be part of the construction of a planet-society relation in which all forms of life will be respected and in which we understand and feel that we are part of the life web. That's the myth we need and want.

## ***David Smith Wiltshire***

***David Smith.*** Panamanian psychologist and sociologist based in Costa Rica and working in Central America for over 30 years. Member of UN Inter Agency Disaster Management Network prior to 15 years' experience in DRM. CEPREDENAC Projects Director 1999 – 2003 and Executive Secretary 2005 - 2008. Previous professional experience in social and economic development and research; interethnic relations; and political analysis (projects, elections, reconciliation processes)

1. Over the past years I have encountered an increasing number of professionals, members of the academic world and public servants aware of DRM and outwardly knowledgeable of concept, theory, international and regional agreements, policy and relatively updated with publications.
2. Nevertheless, very little is done by those same individuals in a practical sense. Discourse and concept prevails over specific commitments, actions and results. DRM is increasingly being addressed, yet DRR is actually the challenge. Risk analysis, control and reduction leads to explicit actions and results, which are summarily lacking. As a result of a 2011 survey of 50% of Costa Rica's municipalities, less than 20% had established ongoing regulatory plans and less than 10% had anything close to local development plans, much less explicit DRR experiences, awareness or activities.
3. Through my immediate experience both lecturing in graduate studies programs and on the field technical assistance to municipalities, NGOs, public institutions and very recent private sector representatives, emergency response and disasters continue to prevail as the mental framework of professionals, students, public servants and the general public.
4. Relevant difficulties prevail when addressing development concerns, understood as:
  - a) Sustainable resource investment strategies and cost – benefit analysis, establishing linkages between DRR and development plans;
  - b) Plans and practices put in place with the purpose of explicitly protecting resources, infrastructure, processes and market linkages (***to be highlighted in 2013 GAR***);
5. When addressing DRM/DRR and CCA concerns within the context of specific sectors (Agriculture; Housing, Urban Development and Water Resource Management; Energy and Communication; Infrastructure; Health and Education; Finance, Banking and Insurance; etc.), concepts and framework does not respond to particular management concerns such as:

- a) A breakdown of the agriculture sector (beans, legumes, fruits, cattle: beef or dairy farming), demands specific knowledge and proposals, follow up and accountability.
  - b) These same activities established within different climatic sub-regions (as is the case in Costa Rica), creates differentiated or heterogeneous demands.
  - c) All the above changes when addressing the other sectors and their specific practices, areas of interest and demands.
  - d) The above forms part of the necessary mental, institutional and action planning framework within the context of recurrent ENSO phases. And as such, enables a more feasible bridge going from ENSO to CCA from the standpoint of the beneficiaries and specific audiences.
6. This immediately deals with another major concern: the recurrent distance and inexistent dialogue between those who produce information (primarily hazards monitoring specialists) and those who require information for knowledge building, planning, decision making and even the media's outreach.
7. ***Hazard monitoring IS NOT a development input.*** Development concerns require:
- a) Processing hazards reports into more business prone frameworks, leading to issues of practical information enabling sustainable use of natural resources; guidelines for business and environmental management; inputs considering growing competitiveness requirements, social corporate responsibilities, public demands, guaranteed servicing and availability of produce.
  - b) More production of information regarding DRM/DRR, CCA and Environmental Management is required, responding to an increased dialogue with sectors, addressing their specific needs.
  - c) For example: What is the specific disaster risks scenario, environmental management needs, development concerns, ENSO recurrence and climate change potential impact for?
    - a. Water in the region, country, municipality or specific location, with regards to its multiple uses (agriculture, agroindustry, cattle farming, fisheries, tourism and services, domestic use, general sanitation, industry and energy, etc.)
    - b. Agriculture focused on beans, corn-maize, rice and sorghum as opposed to agriculture focused on other goods such as legumes, ground level fruits such as pineapples, melons, cantaloupes or even poultry.
  - d) Both public servants and private sector (large, medium and small) directly and indirectly engaged in these activities, are expectant and openly demanding of information, planning tools and significant technical assistance dealing with explicit investment decisions,

production timing, manpower needs, revenue calculus and basic business continuity schemes.

- e) 90% of DRM/DRR experts seem unaware of these needs and demands and continue to address hurricane, earthquakes, landslides, floods, drought and tsunamis with very vague references to vulnerability, as the major source of their work and outputs.
  - f) A structural limitation enabling the above is the fact that Emergency Commissions and Civil Defense entities continue to be considered main agencies responsible of DRM/DRR in each country with unintentional support from the HFA framework.
  - g) These agencies are uncommitted from sector specific, local and national development planning needs and responsibilities, which deals with access to credit and investment issues, resource management and sustainability, business facilities and continuity concerns, jobs, revenues, productivity, servicing, market demands and availability of produce, etc.
  - h) Actors representing these sectors continue to be significantly absent at discussion forums, conferences and knowledge building scenarios regarding both DRM/DRR and CCA.
8. **Bottom lines: what cannot be or shouldn't be lost during any given event, *which will occur?***
  9. What is the chain reaction resulting from any impact on territory, location or sector?
  10. Which territories, resources, facilities, markets, etc., are of strategic importance due to their location, concentration or role regarding social, economic and political stability?
  11. These issues seem absent when discussing DRM/DRR. Are they also absent in the context of CCA?

### ***Christopher Lavell***

*Christopher Lavell has a strong statistical and quantitative background as well as substantial on-the ground experience particularly in construction, building codes, zoning laws and financial risk management toolkits. This skill set helps him serve as a bridge between the social science disciplines that developed the new DRM paradigm, the quantitative sciences that are necessary to establish the evidentiary base needed to justify this paradigm, the decision makers that leverage these components for policy decisions, and the on-the-ground practitioners that implement the solutions.*

The field of DRM has evolved from a stub on the disaster management topic to its own full-fledged field of study over a very short period of time. However, it is readily apparent that although a space has been cleared within which this field can

grow, we are really still at a very nascent stage of development of the topic. The most succinct way to put it is that the previous DM paradigm has entered a period of crisis, in the Khunian sense of the word, due to both the rapid rate of increase of disaster losses which has brought increased attention to disaster risk and the inherently limited scope of the previous civil defense based paradigm toward reducing such disaster losses in the future.

However, although this period of crisis has opened up some space for DRM, a space within which a much richer paradigm can coalesce, it is by no means a foregone conclusion that this new paradigm will come to subsume the older view and approach to disaster management. It is our task to take the new paradigm and follow-up with the extensive task of 'normal science' that follows the creation of a new paradigm and leads to the widespread acceptance and knowledge of such a perspective. The degree of success that this early period of normal science attains will in many ways determine the extent to which this paradigm attains practical application.

So far, this transmission mechanism has yet to be solidly established, although some very encouraging signs can be found. Although preventive measures are still few and far between, mitigative tasks have started to gain a foothold over purely preparatory tasks. Although the linkage between development and disaster is still rather difficult to quantify, some countries have started to move toward an internalization of risk created by public investment projects. And although climate change mitigation has reached a difficult plateau to transcend, climate change adaptation has started to leverage DRM as a pragmatic approach to insure that additional risk is not created by development processes that could make climate change risks even worse.

This confluence of risk sources has helped to propel the DRM paradigm forward as the most intuitively appealing approach to improving conditions, especially for the billions of humans living on the margins. This opportunity provides an opening for a much wider acceptance and implementation of DRM concepts and practice. However, this tailwind behind DRM most probably will have a limited window of opportunity, especially if perceptions of needs and conditions change or if, for purely statistical reasons, a period of relative disaster "calm" happens to ensue, as has been the case many times in the past. One example of this would be the effect that either decreased sun-spot activity or global recession can have on climate change mitigation: either of these externalities can drastically alter risk perceptions, and thus action.

The best way to insure that the benefits of the current DRM tail-wind are maximized is to increase the amount and level of research taking place on the transmission mechanism between DRM concepts and on the ground practice. That is, we need a combination of stronger empirical evidence to support DRM concepts and more long-term, non-expiring programs that tangibly implement DRM concepts in quantifiable, measurable ways. Both of these directions need to be expanded if we wish to better predict the outcomes of DRM interventions in the future. Once we can predict these outcomes within reasonable thresholds of uncertainty it will become much easier for DRM practitioners, as well as policy and decisions makers, to justify, or 'sell', these interventions to their superiors and their populaces.

Prime examples of this internalization of disaster risk can now be seen in the business world, where a series of unpredicted losses, such as the reinsurance losses tied to business continuity policies that were triggered throughout the world by flooding events in a very geographically isolated part of the world or the exchange risk losses tied to the Japanese carry trade have led to novel mechanisms for managing these risks. Of course, micro-level mitigation can and often does lead to macro-level increases in risk, as was the case with the rapid appreciation of the Yen after the recent Japanese earthquake that led to an unprecedented G-20 intervention in currency markets.

It is only to be expected that micro-level actors will move earlier than macro-level actors, and some additional risk creation is to be expected from such uncoordinated micro-level activities. The important take-away is not that these micro-level activities need to be mitigated before they are implemented, but rather that macro-level policies need to be implemented that leverage advances that the micro-level players have established as viable ways of reducing risk in a way that reduces overall risk.

To summarize, DRM has provided a compelling alternative paradigm to the established DM approach, and we are currently in a period where this new paradigm has a good chance at gaining significant traction if we can improve the transmission mechanisms and evidentiary base that helps justify and provide practical applications to the paradigm. The smooth transition from period of crisis to a new period of normal science is entirely dependent on our ability to execute on these linkages between theory and application.

## Alvaro Montero

Los resultados prácticos que se reportan en la literatura internacional parecen demostrar que los esfuerzos de las autoridades políticas en el tema de los Riesgos ante Desastres (GdR) no parecieran que estén resolviendo las necesidades y las demandas ni de los grupos objetivo (quienes causan el problema) pero tampoco de los beneficiarios finales (quienes padecen los efectos negativos del problema) para una reducción efectiva y sostenida de la Vulnerabilidad ante Desastres.

Usando como herramienta metodológica de análisis el Ciclo de la



Política Pública<sup>3</sup>, tal y como se presenta en el gráfico siguiente; Podemos observar como si bien se han realizado grandes esfuerzos por dimensionar apropiadamente la percepción del problema, también se han logrado importantes avances en la inclusión del tema en la agenda gubernamental y la voluntad para trabajarlo, pero para los siguientes eslabones de la cadena los resultados no son tan claros. A la hora de formular alternativas de solución se han enfocado de forma notable en las acciones legislativas con leyes y decretos pero no hay los mismos resultados con otras alternativas, si es que las hay. Esto ha llevado a que la identificación de actores no haya sido tan contundente y por lo tanto la implementación de los planes de acción haya sido deficiente. Pero, donde el fracaso se hace más notable, es en la evaluación de los efectos de la Política Pública en GdR. En los mismos reportes del informe de evaluación global sobre la reducción del riesgo de desastres que desarrolla las Naciones Unidas, (conocido como GAR) se nota una excesiva complacencia de los interesados en llenar las evaluaciones de forma muy positiva. En esta misma línea, si este último proceso fuera más riguroso, permitiría a la hora de re-iniciar el ciclo de nuevo, mejoras en la política pública que pudiera haber considerado cambios en la GdR, para ajustarse a nuevas amenazas o variaciones en la vulnerabilidad y la exposición, como por ejemplo el lento pero notable impacto del cambio climático.

De una forma menos teórica, esto se percibe en la práctica diaria, a partir del constante y reincidente comentario de los que trabajan en el tema, de que: las cosas no se arreglan, que seguimos igual o que lo alcanzado es muy poco respecto a lo esperado o lo invertido.

Con todas las compilaciones de buenas prácticas, casos exitosos y estudios similares es notoria como de forma puntual se pueden identificar los grandes esfuerzos desplegados en el trabajo en GdR pero porque estos son tan puntuales, tan de corto plazo y sobre todo tan poco sostenibles en el tiempo. Es por eso que adaptando algunos de los conceptos de Jorge Hintze en su obra: Instrumentos de Evaluación de la Gestión del Valor Público, se podría ilustrar este fenómeno, y como la reducción de riesgos ante Desastres de forma sostenida en el tiempo, es todavía un reto en el planeta.

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<sup>3</sup> En una adaptación propia a partir de la propuesta de: Parsons, W. (1995). Public Policy, An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar. Y de: Subirats, J., Knoepfel, P., Larrue, C., Varone, F. (2008). Análisis y gestión de políticas públicas. España editorial Ariel.

En el gráfico siguiente se puede notar como las decisiones respecto a los riesgos pueden ser básicamente de cuatro tipos. Las “Poco Efectivo-Poco Sostenible” que se explican por sí mismo. Las “Muy Efectivo-Poco Sostenibles” son las típicas acciones tomadas justo después del impacto del evento adverso donde las autoridades políticas mas que pensando en política pública se ven urgidas en demostrar que están haciendo “algo” respecto al desastre pero poco a poco esas medidas se van desmoronando ante la imposibilidad de sostenerse. Las “Poco Efectivo-Muy Sostenibles”, son las que oficinas de gestión del riesgo disminuidas en recursos humanos, técnicos y financieros, altamente burocratizadas o inmovilizadas legalmente tratan de hacer “algo”, y aunque llevan años han logrado muy poco.

**Matriz de Efectividad Sostenible en Gestión de Riesgos ante Desastres**



Pero lo verdaderamente importante, el reto es llegar a colocarse en el cuadro “verde” donde las acciones para la GdR son efectivas pero sobre todo sostenibles en el tiempo. No son decisiones de corto plazo como las tres anteriores sino más bien del largo plazo y no dependen de la autoridad gubernamental de turno sino de una Política Pública en todo su amplio sentido Solo así se podrían realmente generar las condiciones para una efectiva y sostenible reducción de riesgos.

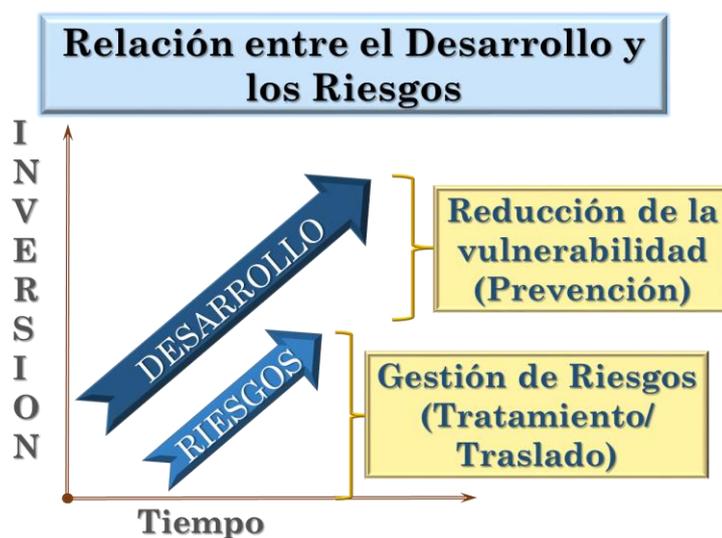
Sin embargo, es importante destacar que los riesgos son algo inherente a los modelos de desarrollo que se estén implementando en un mundo cada vez más globalizado, es de alguna forma un subproducto de la modernidad, según algunos autores como Niklas Luhmann y Ulrich Beck.

Por lo tanto sin importar en que color de cuadro del grafico anterior se ubiquen las decisiones y como se aplique la Política Pública en GdR lo verdaderamente importante en el largo plazo no es la Gestión de los Riesgos *per se*, dado que esto implica que estos ya fueron creados y solo estamos controlándolos ya sea tratándolos de alguna forma o trasladándolos a un tercero, y así eventualmente reducirlos. El enfoque debe ser la no-creación de riesgos. Así que el esfuerzo debe ir encaminado a que el desarrollo siga su curso pero no produzca nuevos o incrementa los riesgos existentes. En otras palabras que no se generen mayores niveles de exposición; y donde la vulnerabilidad pueda ser controlada en sus orígenes para no reproducirla o potencializarla. Acción que no pareciera fácil dado

que la presión por el uso de los recursos naturales en general, hace que cada vez se asuman estos con mayores niveles de laxitud. Un ejemplo de ello es la presión por la tierra para la ubicación de los asentamientos humanos.

Aquí es donde el concepto del riesgo debe ser visto dentro de otro mucho más comprensivo y amplio el desarrollo, y para ilustrar lo expuesto se usa la gráfica siguiente. Que es una elaboración propia a partir de la obra compilada por Josetxo Beriain "Consecuencia perversas de la modernidad".

El objetivo de la Política Publica en GdR debe ser que la flecha del desarrollo no tenga el mismo tamaño que la flecha de los riesgos. Entre más parecidas estén, más riesgos se estarán forjando, y por lo tanto más problemas para la gestión de riesgo se estarán provocando. Por el contrario, entre más pequeña sea la segunda mayor será el nivel de prevención que se estará generando. Asegurando un desarrollo sostenible estamos asegurando a su vez una prevención de riesgo efectiva y una adecuada Política Publica.



Pero para esto es necesario e indispensable que otros actores participen en la discusión, y estos son los del desarrollo y los de las políticas públicas, los que hasta hoy no han participado activamente con los gestores del riesgo ante desastres en la búsqueda de puntos de encuentro que permitan la prevención de los riesgos.