Resilience: Concept and Frameworks

Phil Gelman
Regional Advisor
USAID/BHA/LAC













International Framework of Action for the International Decade for Natural Disaster Reduction

A. OBJECTIVE AND GOALS

- The objective of the International Decade for Natural Disaster Reduction is to reduce through concerted international action, especially in developing countries, the loss of life, property damage and social and economic disruption caused by natural disasters such as earthquakes, windstorms, tsunamis, floods, landslides, volcanic eruptions, wildfires, grasshopper and locust infestations, drought and desertification and other calamities of natural origin.
 - The goals of the Decade are:
- (a) To improve the capacity of each country to mitigate the effects of natural disasters expeditiously and effectively, paying special attention to assisting developing countries in the assessment of disaster damage potential and in the establishment of early-warning systems and disasterresistant structures when and where needed:
- (b) To devise appropriate guidelines and strategies for applying existing scientific and technical knowledge, taking into account the cultural and economic diversity among nations;
- (c) To foster scientific and engineering endeavours aimed at closing critical gaps in knowledge in order to reduce loss of life and property;
- (d) To disseminate existing and new technical information related to measures for the assessment, prediction and mitigation of natural disasters
- (c) To develop measures for the assessment, prediction, prevention and mitigation of natural disasters through programmes of technical assistance and technology transfer, demonstration projects, and education and training, tailored to specific disasters and locations, and to evaluate the effectiveness of those programmes.









International Decade for **Natural Disaster Reduction**

- First effort to get beyond disaster response
- Focus on vulnerability
- No mention of "resilience"







SUMMARY of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (Hyogo Framework)

Expected outcome, strategic goals and priorities for action 2005-2015 **Expected Outcome** The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries Strategic Goals ent goals (including the The integration of disaster risk reduction into Development and strengthening of institutions, The systematic incorporation of risk reduction sustainable development policies and planning mechanisms and capacities to build resilience to approaches into the implementation of emergency preparedness, response and recovery programmes **Priorities for Action** 1. Ensure that disaster risk 2. Identify, assess and monitor 3. Use knowledge, innovation 4. Reduce the underlying risk factors Strengthen disaster preparedness reduction (DRR) is a national disaster risks and enhance early and education to build a culture for effective response at all levels and a local priority with a of safety and resilience at strong institutional basis for all levels implementation . DRR institutional mechanisms Information sharing and cooperation Risk assessments and maps Sustainable ecosystems and environmental Disastermanagement capacities: Networks across disciplines and multi-risk: elaboration and policy, technical and institutional (national platforms): management designated responsibilities dissemination regions; dialogue DRR strategies integrated with climate change capacities Use of standard DRR terminology Dialogue, coordination & information DRR part of development Indicators on DRR and vulnerability adaptation exchange between disaster managers policies and planning, sector Data & statistical loss information Inclusion of DRR into school Food security for resilience wise and multisector Early warning: people centered; curricula, formal and informal DRR integrated into health sector and safe hospitals and development sectors information systems; public policy education Legislation to support DRR Protection of critical public facilities Regional approaches to disaster Training and learning on DRR: Decentralisation of Scientific and technological Recovery schemes and social safety- nets response, with risk reduction focus responsibilities and resources community level, local authorities, development data sharing, space Vulnerability reduction with diversified income options Review & and exercise preparedness targeted sectors; equal access Assessment of human based earth observation, climate Financial risk-sharing mechanisms and contingency plans resources and capacities modeling and forecasting; early Research capacity: multi-risk; socio- Public-private partnership Emergency funds economic; application Land use planning and building codes Voluntarism & participation Foster political commitment Contributing to the Community participation Regional and emerging risks Public awareness and media Rural development plans and DRR **Cross Cutting Issues** Multi-hazard approach Gender perspective and cultural diversity Community and volunteers participation Capacity building & technology transfer

DRR= disaster risk reduction www.unisdr.org

Strategic Goal

Development and strengthening of institutions, mechanisms and capacities to build **RESILIENCE** to hazards













2009 **UNISDR** Terminology

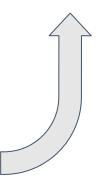
Disaster Risk Reduction



Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Comment: Resilience means the ability to "resile from" or "spring back from" a shock. The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need.









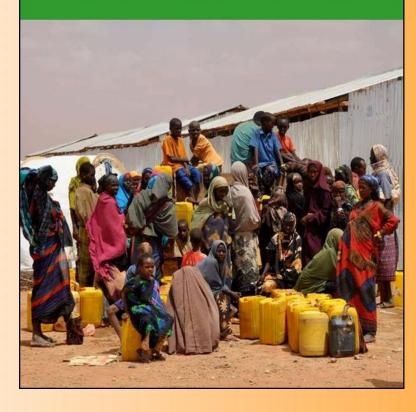




Saving lives, preventing suffering and building resilience:

The UK Government's Humanitarian Policy

DFID Department for International Development













PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21. CMP11











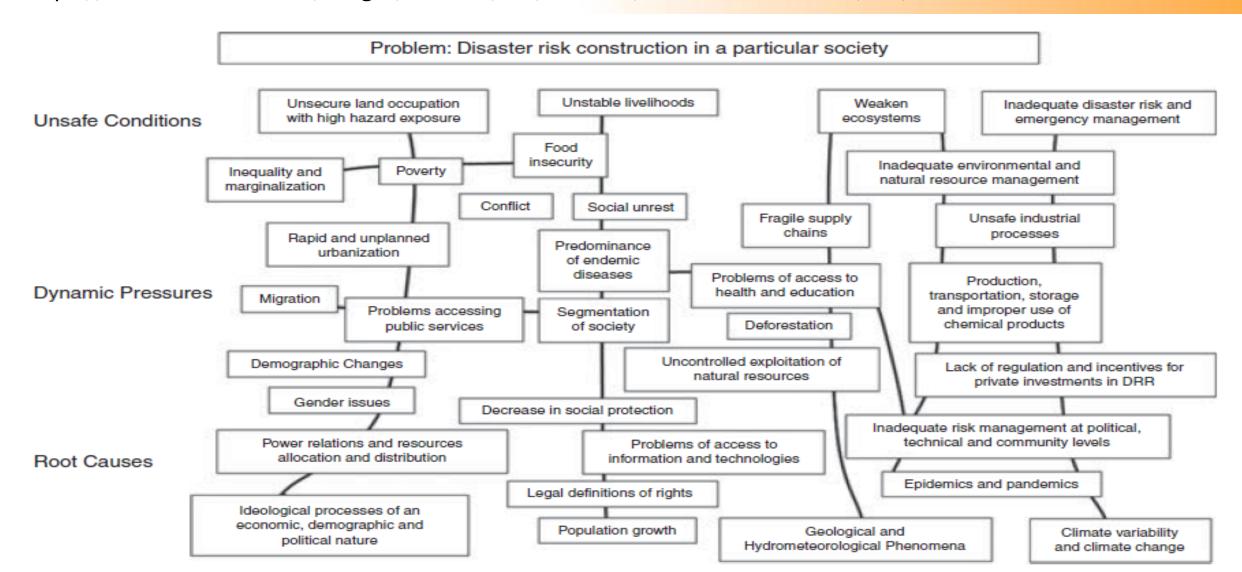
"What is the post-2015 development agenda? A look from the underlying disaster risk drivers"

Juan Pablo Sarmiento

Extreme Events Research Institute,

Florida International University

https://www.emerald.com/insight/content/doi/10.1108/DPM-03-2018-0088/full/html



Objective: Sustainable and safe development for a particular society Secure land Sufficient and resilient Robust and resilient Adequate disaster risk and occupation livelihoods ecosystems emergency management Citizen Extreme poverty Adequate environmental and natural Food security eradication security resources management Clean, safe and sustainable Low incidence of Resilient supply Planned urbanization. industrial processes endemic diseases chains enforcement and compliance with building codes Proper production, Sustainable mining Control of transportation, storage Access to public activities and others Deforestation Access to health and use of chemical from the primary sector services and education products of production Gender approach Appropriate social Regulation and incentives for Participation protection measures private investments in DRR and equity Appropriate risk management at Access to information Adequate relations of power, and resources political, technical and community level and technologies allocation and distribution Knowledge about climate Surveillance and control of communicable diseases Legal definitions of rights change and climate variability Problem: Disaster risk construction of a particular society

Interventions	Disaster risk reduction agenda	Climate agenda	Sustainable development agenda
Domain 1: secure land occupation Citizen security Planned urbanization, enforcement and compliance with building codes Access to utilities Gender approach	GP10		Goal 11 Goal 16
	Target D	D2	Goal 9 Goals 6, 7 Goal 5
Participation and equity Adequate relations of power, and resource allocation and distribution Legal definitions of rights Domain 2: sufficient and resilient livelihoods Extreme poverty eradication Food safety Low incidence of endemic diseases Access to health and education Resilient supply chains Appropriate social protection measures Access to information and technologies Domain 3: robust and resilient ecosystems Adequate environmental and natural resources management	GP4, GP5, GP6, GP7		Goals 10, 11, 16
	GP3 GP10	Goal 2	Goals 10, 11, 16 Goals 10, 11, 16 Goal 8 Goal 1 Goal 2
	Target D		Goals 3, 4 Goal 12 Goal 8
	GP10	D2	Goal 15 Goal 15
Clean, safe and sustainable industrial processes Control of Deforestation Sustainable mining activities and others from the primary sector of production Regulation and incentives for private DRR investments Domain 4: adequate disaster risk and emergency management Proper production, transportation, storage and use of chemical products Appropriate risk management at political, technical and community level Surveillance and control of communicable diseases Knowledge about climate change and climate variability		Goal 1 – D1 D2	Goal 9 Goal 15
		D2	Goal 14
	Targets A, B, C, E, G – GP10	D2, D3	
	Targets A, B, C	D2,	Goal 13
		Goals 1, 2, 3 – D3	Goal 13

Objective: Sustainable and safe development for a particular society Secure land Sufficient and resilient Robust and resilient Adequate disaster risk and Sendai livelihoods occupation ecosystems emergency management **Paris** Citizen Extreme poverty Adequate environmental and natural Food security **SDG** eradication security resources management Clean, safe and sustainable Low incidence of Resilient supply Planned urbanization, industrial processes endemic diseases chains enforcement and compliance with building codes Proper production, Sustainable mining Control of transportation, storage activities and others Access to public Deforestation Access to health and use of chemical from the primary sector services and education products of production Gender approach Appropriate social Regulation and incentives for Participation protection measures private investments in DRR and equity Appropriate risk management at Access to information Adequate relations of power, and resources political, technical and community level and technologies allocation and distribution Knowledge about climate Surveillance and control of communicable diseases Legal definitions of rights change and climate variability Problem: Disaster risk construction of a particular society

Key conclusions

"... the risk reduction agenda places a strong emphasis on the integrated and anticipated risk management, going from event management to the management of the processes that generate risks."

"... true development necessarily implies its sustainability, which is why it is incompatible with the existence of unmanaged risk, since it can compromise the achievements obtained."

"... disaster risk management should not be considered as a 'sector' in itself, it is a practice that permeates all sectors and seeks to avoid risk construction, reduce existing risks, and strengthen resilience."









