

Conceptual framework on disaster risk reduction and adaptation to climate change



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Dialogue on Disaster Risk Reduction

#ParlAmericasCC #Switch2Sendai

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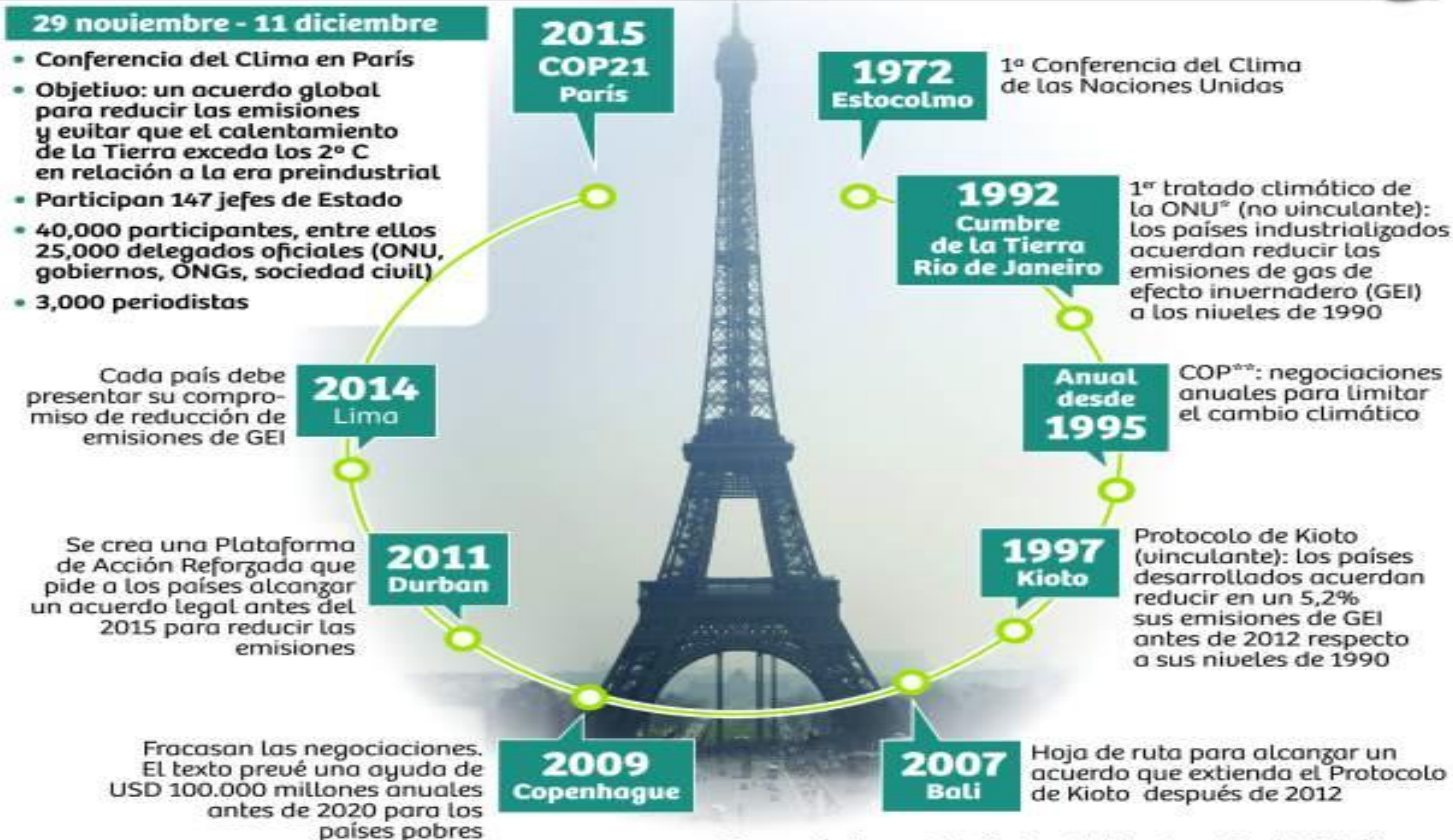
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I. INTERNATIONAL LEVEL

I.1 International Legal Framework for Climate Change

Un largo camino para llegar a un acuerdo climático

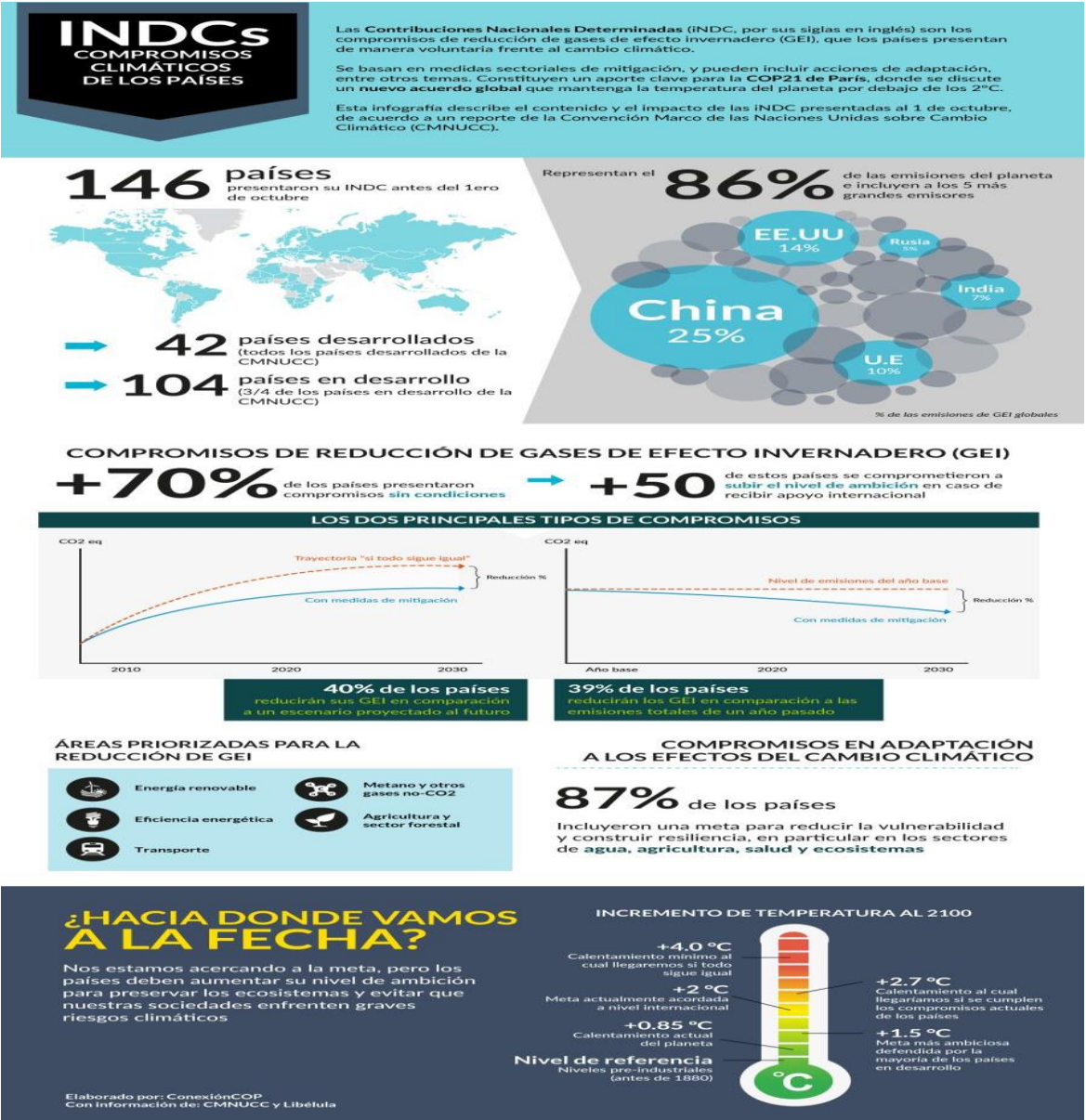


*Convención Marco de las Naciones Unidas sobre el Cambio Climático

**Conferencia de las Partes de la Convención

INFOGRAFÍA: AFP/LA PRENSA

FUENTE: ONU; GOBIERNO FRANCÉS



I.2 International Framework for Disaster Risk



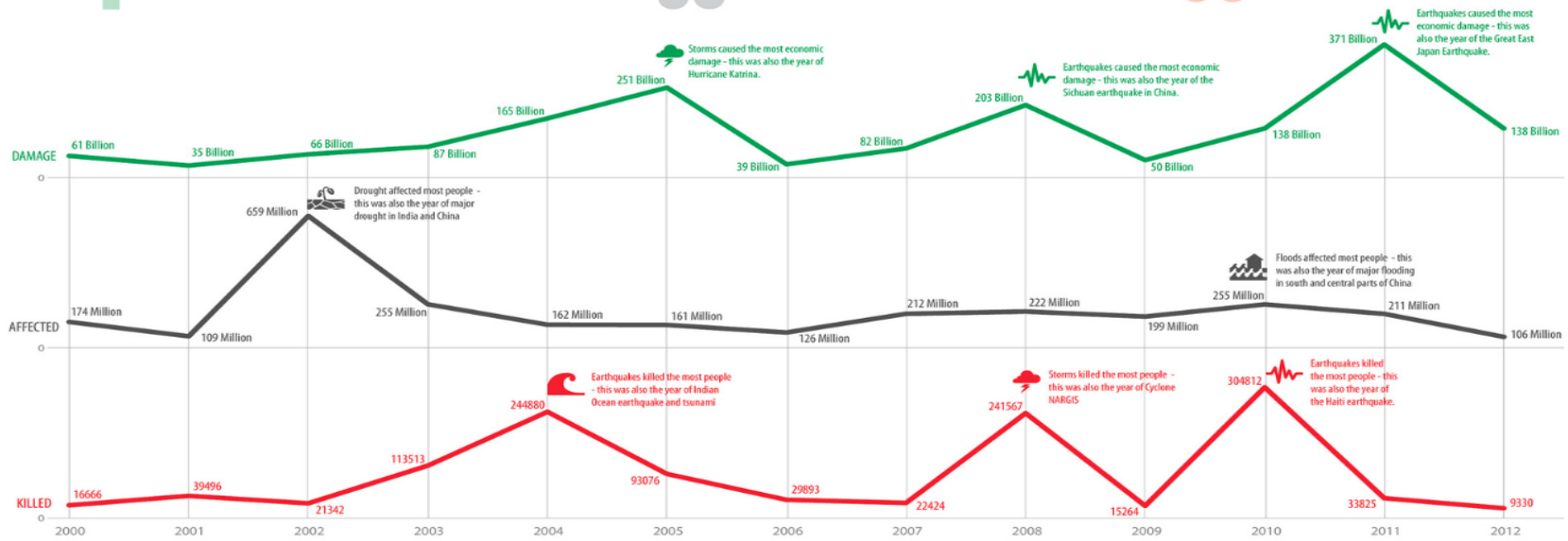
DISASTER IMPACTS / 2000-2012

*Disasters refers to drought, earthquake (seismic activity), epidemic, extreme temperature, flood, insect infestation, mass movement (dry & wet), storm, volcano, and wildfire / Data source: EM-DAT: The OFDA/CRED International Disaster Database / Data version: 12 March 2013 - v12.07
OCHA Humanitarian Symbol (2012): <http://reliefweb.org/map/world/world-humanitarian-and-country-icons-2012/> / Find out more about UNISDR: <http://www.unisdr.org>

\$1.7 TRILLION
DAMAGE (USD)

2.9 BILLION
AFFECTED

1.2 MILLION
KILLED



Hyogo Framework(2005-2015)

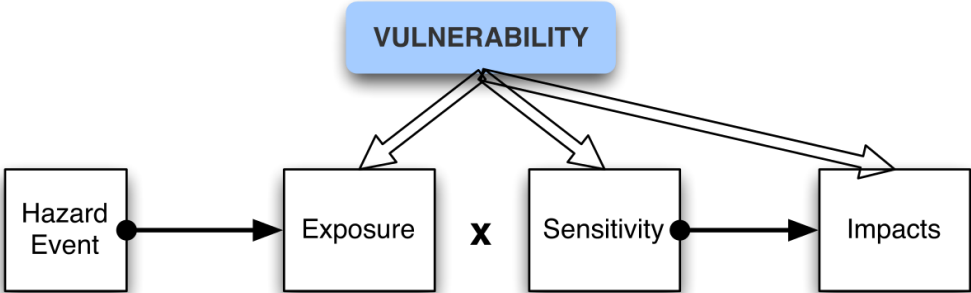
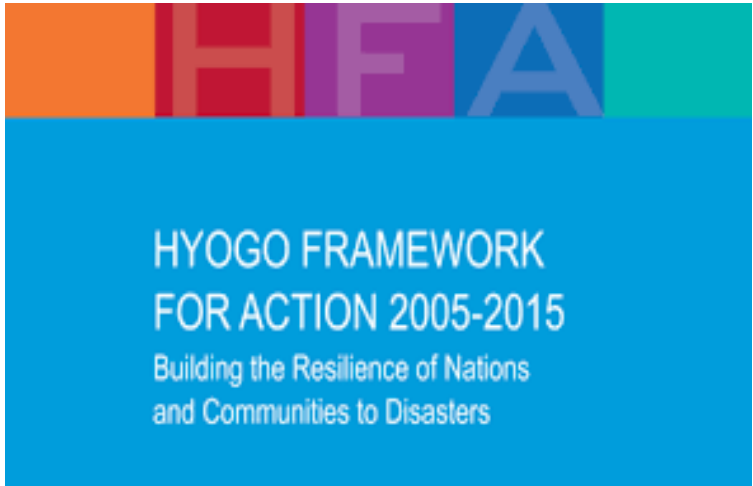


diagram after Turner et al., 2003

Sendai Framework (2015-2030)

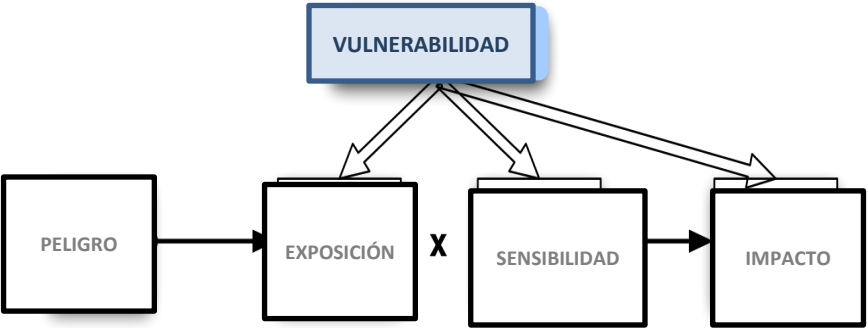
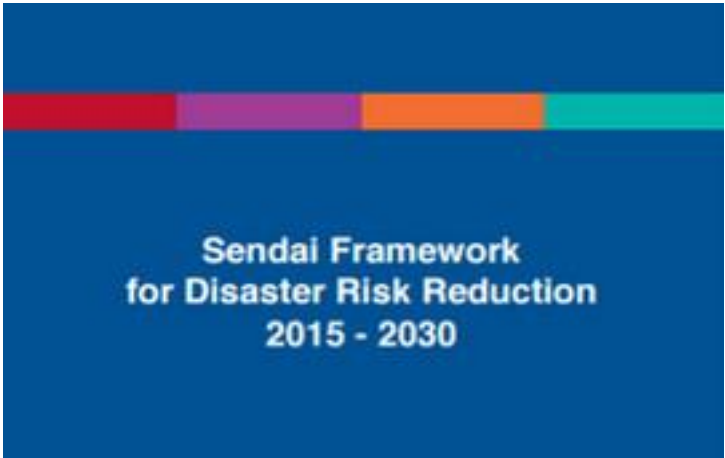


diagram after Turner et al., 2003





www.preventionweb.net/go/sfdr
www.unisdr.org
isdr@un.org

Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors.

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030
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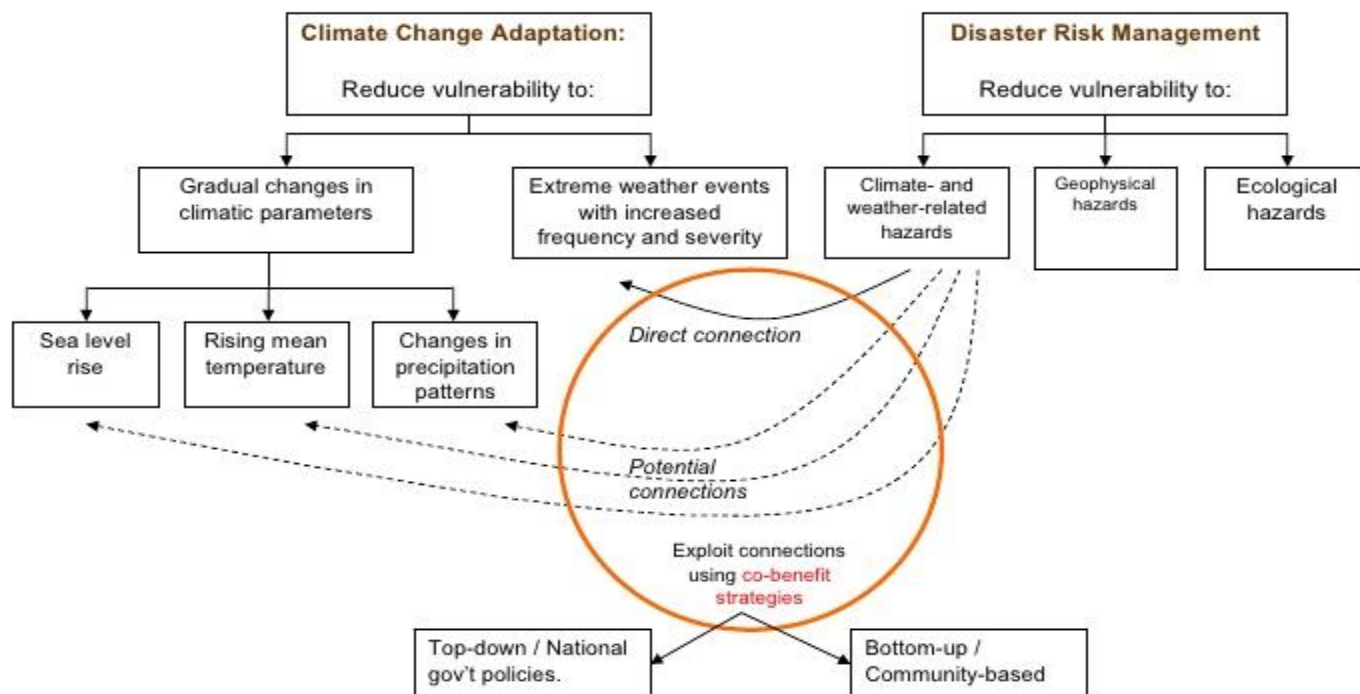
Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.

- Priority 1**
Understanding disaster risk
- Priority 2**
Strengthening disaster risk governance to manage disaster risk
- Priority 3**
Investing in disaster risk reduction for resilience
- Priority 4**
Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

I.3 Linkages Climate Change Adaptation and Disaster Risk

- B Conceptual Linkages of Climate Change Adaptation and Disaster Risk Management (CCA-DRM)



(SOURCE: Castillo, Charlotte Kendra G, 2007) snf Manila Observatory

II. NATIONAL LEVEL

II.1 Climate Change Legislation



Brazil, Ecuador, Guatemala, Mexico,
Honduras, Dominican Republic, Paraguay,
Indonesia, Japan, Micronesia, New
Zeland, Philippines, Senegal, United
Kingdom, Vietnam, Nigeria,
Peru, El Salvador, Guinea, Laos,
Colombia, Brunei, Bosnia, Botsuana,
Chad, Albania, China, Oman, Sierra Leone

- 15 Countries with CC Legislation, 7 countries in Latin America
- 2 Countries with bills, 1 country in Latin America
- 13 Countries that have committed to a CC law, 3 countries in Latin America

	MOTIVATION	COUNTRIES
1	Obligation needed in national level.	All
2	To reduce vulnerability	Brazil - Guatemala – Indonesia – Mexico – Micronesia – Philippines – Senegal – Nigeria – Peru – Vietnam – Japan
3	To reduce GHG	Brasil – Ecuador – Indonesia – Japan – New Zeland – United Kingdom
4	Sustaninable development	Guatemala – New Zeland – Philippines – United Kingdom – Vietnam – Peru
5	To reduce costs	Brazil - Mexico – New Zeland – United Kingdom (Stern, Brazil 5 al 20% of GDP, 1% Global GDP)
6	National Security	New Zeland: food security, water scarcity Micronesia: sea level rise that affects food security, including water resources Mexico: food security (agricultural losses) water, health. Guatemala: food security Philippines: sea level rise/ water security

CONTENIDOS/CONTENTS

- ✓ Institutional framework
- ✓ Economic instruments
- ✓ Participation

RECOMENDATIONS INSTITUTIONAL FRAMEWORK

RECOMENDATION	INTERNATIONAL ORGANIZATION
High level	Banco Mundial, Gitay et al 2013
Transversality	OCDE, 2015
Strengthening local governments	OCDE, 2015, IPCC, 2014b, Nobuoka, Ellis, & Sarah, 2015
Participation	OCDE, 2015
Science	OCDE, 2015
Monitoring and accountability	OCDE, 2015

II.2 Disaster Risk Legislation



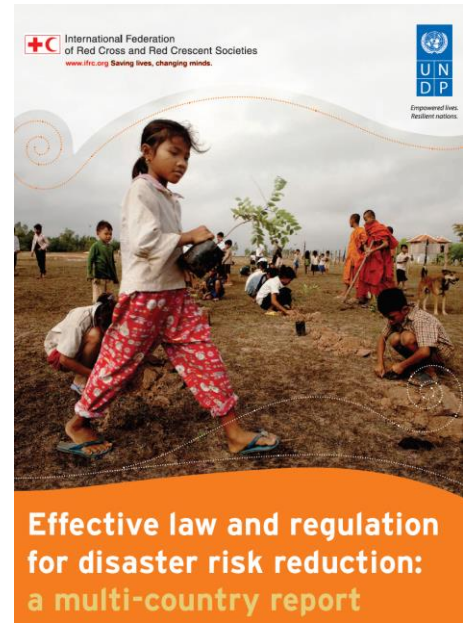
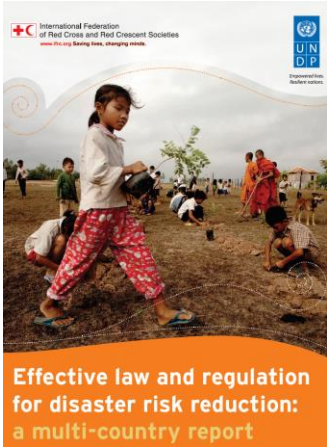


Table 4: Matrix of DRM law typology and country context

Country exposure to natural hazards				
	High			
	Medium			
	Low			
		Low	Medium	High
		Country disaster risk governance capacity through sectoral laws		
High	DRR priority law (high detail)	DRR priority law (high detail)	DRR priority law (low detail)	
Medium	DRR priority law (high detail)	Broad DRM law	DRR priority law (low detail)	
Low	Broad DRM law	Broad DRM law	Preparedness and response law	

Table 5: Overview of laws on building, construction and land use planning



Sample Countries	Territory-Wide Building Codes – National or State		Local Building Approvals/ Regulations		Land Use Planning – National or State		Local Land Use Planning Approvals/ Regulations	
	Law	Guide ¹	Law	Guide	Law	Guide	Law	Guide
Algeria								
Angola		-		-				-
Australia	n/a ²					-	-	-
• State of Victoria		-		-		-		-
Austria	n/a			-		-		-
Brazil	n/a			-				-
China (PRC)		-		-		-		-
• Hong Kong SAR				-		-		-
Dominican Republic							-	
Ecuador		-		-	-	-		-
Ethiopia		-	-			-		
Guatemala				-		-		-
India			-	-			-	
• State of Orissa		-			-	-		-
• State of Punjab		-		-		-		-
Iraq ³	-	-	-	-	-	-	-	-
Italy		-		-		-		-
Japan		-		-		-		-
Kenya		-		-		-		
Kyrgyzstan		-		-		-		-
Madagascar		-		-		-		-
Mexico		-		-		-		-
Namibia		-		-				-
Nepal						-		-
New Zealand		-		-		-		-
Nicaragua		-		-		-		-
Nigeria			-			-		-
Philippines		-		-		-		-
South Africa							-	-
St. Lucia			n/a	n/a		-	n/a	n/a
Ukraine		-		-		-		-
United States of America	n/a		n/a	n/a			n/a	-
• State of Illinois				-		-		-
• State of Louisiana		-		-		-		-
Uruguay		-		-		-		-
Vanuatu			-	-				
Viet Nam				-		-		-

18.2 Country examples of legal provisions for DRR in climate change laws

Most of the sample countries do not have a law or specific legal framework for managing CCA, although the majority have CCA national policies. The nine sample countries that do have such a law, as opposed to a law on climate change mitigation only are: **Algeria, Brazil, Dominican Republic, Japan, Kyrgyzstan, Mexico, New Zealand, the Philippines and Uruguay**, all of which also have a national CCA policy.²⁶⁶ Fifteen other sample countries have institutional mechanisms on CCA, established administratively by the executive and at times mandated by a specific policy. The most recent of these mechanisms at the time of writing was a federal task force to address the risks of climate change, created by executive order in the **United States**, in November 2013.²⁶⁷ In sum, more than two thirds of the sample group (25) are addressing CCA in some formal way, as summarized in Table 6. In addition, **Kenya** and **Vanuatu** both have drafts laws on CCA under consideration.²⁶⁸

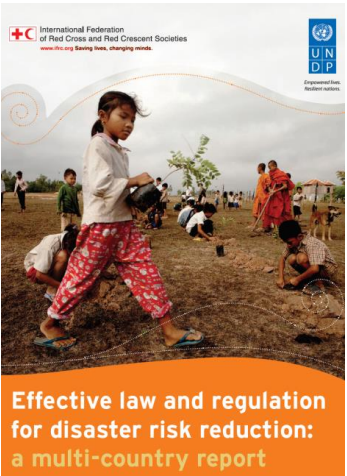


Table 6: Climate change adaptation law and policy

COUNTRIES WITHOUT CCA LAW OR POLICY	COUNTRIES WITH CCA POLICY ONLY	COUNTRIES WITH CCA LAW AND POLICY ⁱ
Angola Austria Kenya Italy Iraq Madagascar Nicaragua	Australia China Ecuador Ethiopia Guatemala India Namibia Nepal Nigeria South Africa St. Lucia Ukraine United States Vanuatu Viet Nam	Algeria Brazil Dominican Republic Japan Kyrgyzstan Mexico New Zealand Philippines Uruguay

ⁱ Kyrgyzstan, Mexico, Philippines and Uruguay have both laws and policies specifically for CCA, while Algeria and New Zealand include CCA in existing laws.

III. CHALLENGES AND CONCLUSIONS

ROLE OF THE PARLIAMENTARIAN

- To contribute to social and political consensus
- Stability policy vs political terms
- Finance

WHY?

- Responsibility
- Vulnerability
- Social consensus

-INTERNATIONAL COMMITMENTS

- Acuerdo de París
- NDC

FUTURE GENERATIONS

- Objetivos de desarrollo sustentable

CONFLICT

- Climate change litigation

<http://climatecasechart.com/non-us-climate-change-litigation/>

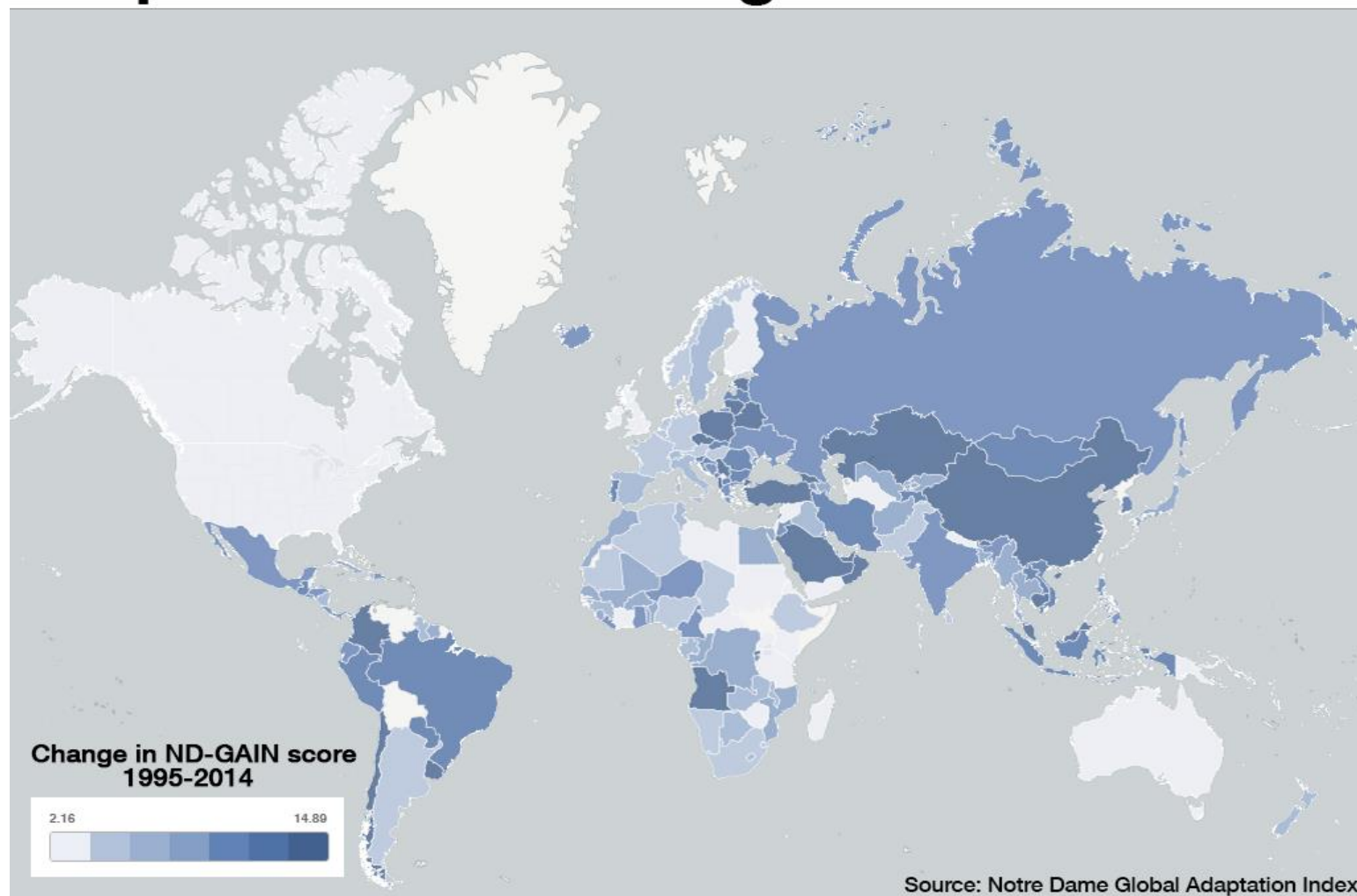
A SUCCINCT, HOLISTIC LOOK AT CLIMATE CHANGE LEGISLATION*

Chris Henry**

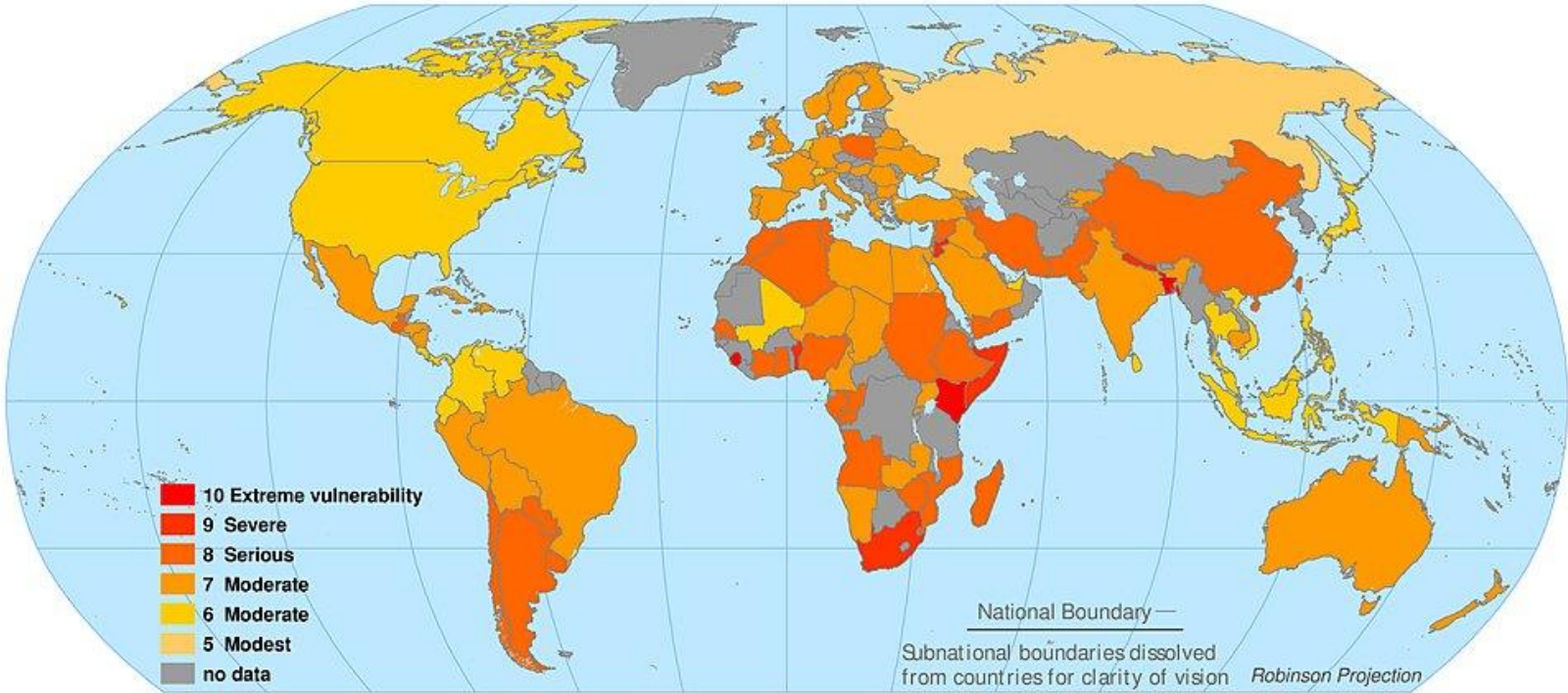
IV. LITIGATION AS AN ALTERNATIVE TO LEGISLATION

In some instances, federal legislation either moves too slowly or is not very effective. This section explores two cases effecting climate change (one at the national level and one at the supranational level) and concludes that, to an extent, litigation can be a valid alternative to climate change legislation.⁵³ Although neither of the cases discussed herein utilized the doctrine of public nuisance, some courts have used this doctrine to combat climate change.

Which countries have done the most to adapt to climate change?



Global Distribution of Vulnerability to Climate Change
Combined National Indices of Exposure and Sensitivity



Scenario A2-550 in Year 2050 with Climate Sensitivity Equal to 5.5 Degrees C
Annual Mean Temperature with Extreme Events Calibration

<http://ciesin.columbia.edu/data/climate/>



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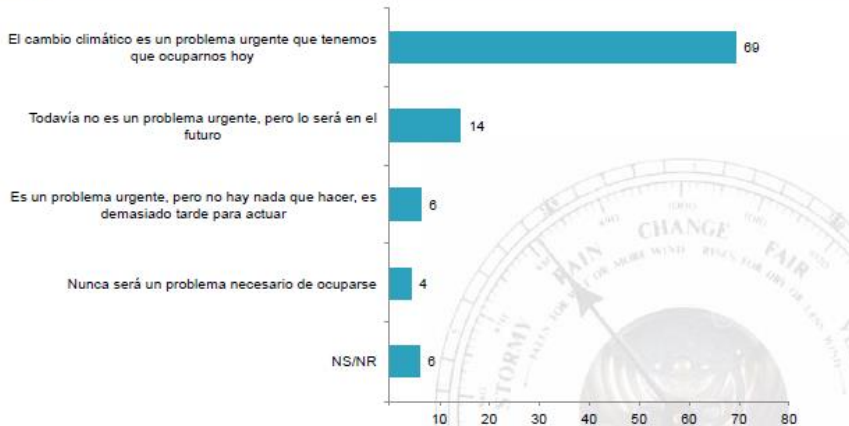


OPINIÓN SOBRE EL CAMBIO CLIMÁTICO

TOTAL AMÉRICA LATINA 2017



P. ¿Con cuál de las siguientes frases está Ud. más de acuerdo? El cambio climático..



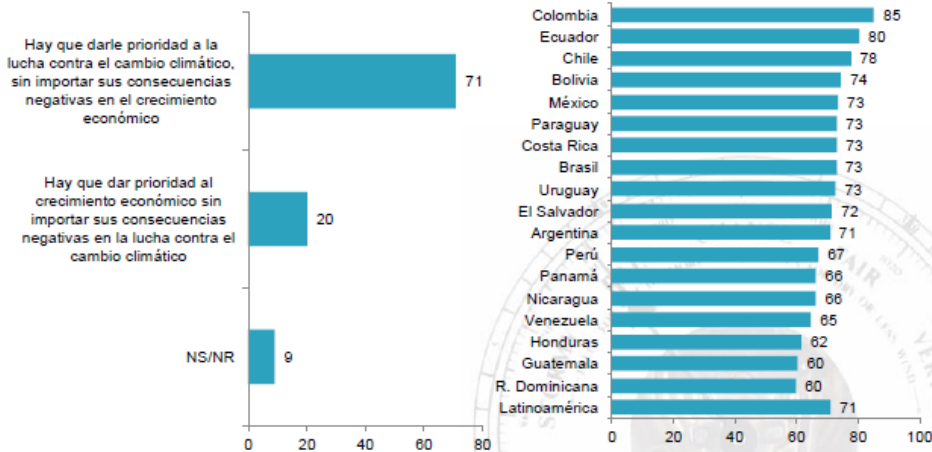
Fuente: Latinobarómetro 2017.

PRIORIDAD DEL PROBLEMA DEL CAMBIO CLIMÁTICO

TOTAL AMÉRICA LATINA 2017 - TOTALES POR PAÍS 2017



P. ¿Con cuál de las siguientes frases está Ud. más de acuerdo? Aquí solo "Hay que darle prioridad a la lucha contra el cambio climático, sin importar sus consecuencias negativas en el crecimiento económico".



Fuente: Latinobarómetro 2017





Figura 2: Porcentaje de personas que cree que el cambio climático está ocurriendo

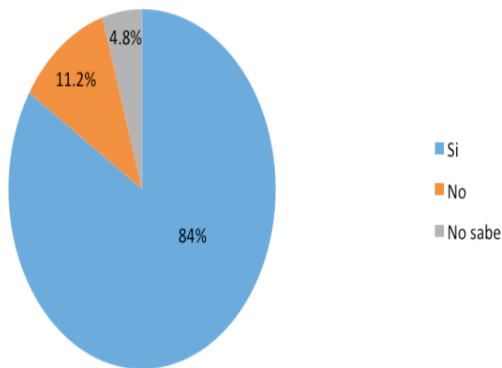


Figura 6: Percepción de las personas sobre la gravedad de los efectos o impactos del cambio climático

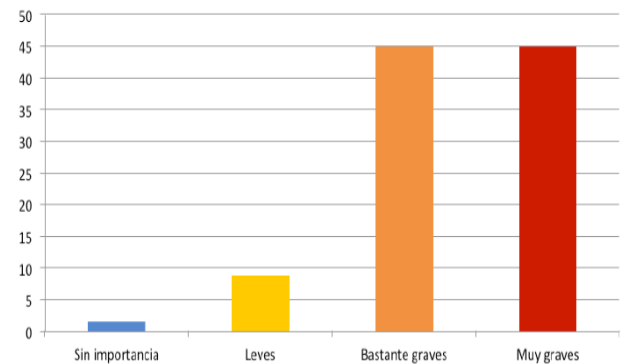


Figura 7: ¿Cuán importantes es el cambio climático para usted y para los chilenos?

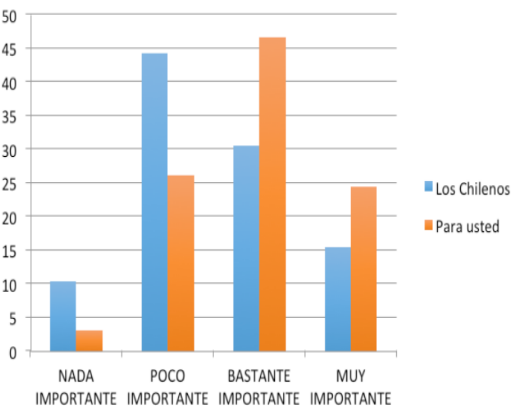


Figura 11: Percepción del nivel de preparación de Chile para enfrentar el cambio climático

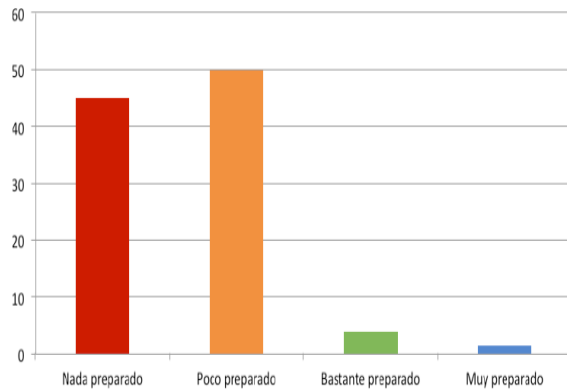
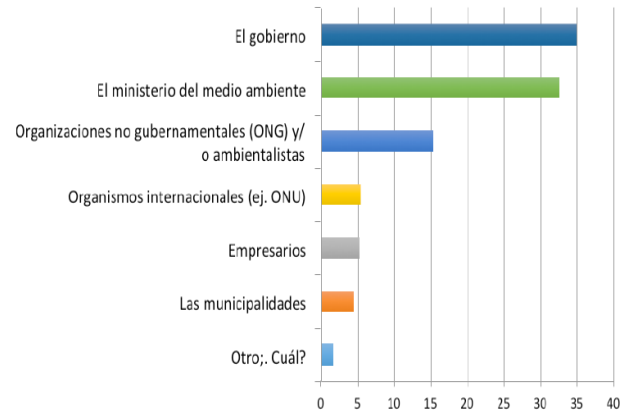


Figura 21: ¿Quién debería liderar el problema del cambio climático en Chile?





¡GRACIAS!
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