

Global Trends and Challenges: Essential Pre-Disaster Planning for Post-Disaster Resilience

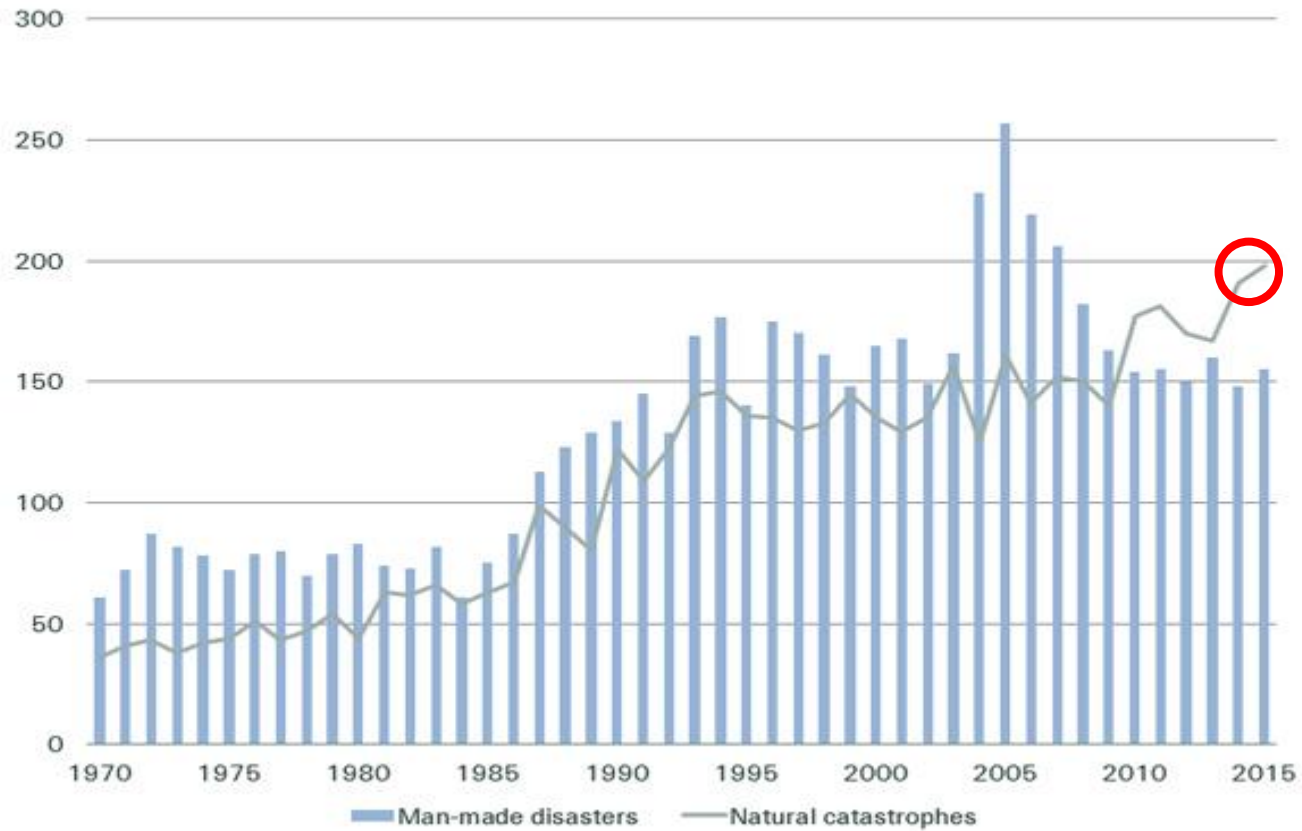
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Introduction

- The frequency of out of scale disasters continues to increase
- Novel problems and their consequences pose a significant challenge to our way of life
- A greater focus on preparedness contributes to improved response and recovery outcomes
- Pernicious traditions are a barrier to reform and an impairment

Global Context



Source: Swiss Re Economic Research & Consulting (2016)

Financial Context

- Total economic losses from natural catastrophes and manmade disasters were estimated to be USD 158 billion for 2016



Fort McMurray, Canada

- 230,000 hectare wildfire
- 90,000 evacuated
- 6.4 billion € of insured losses



Game Changers

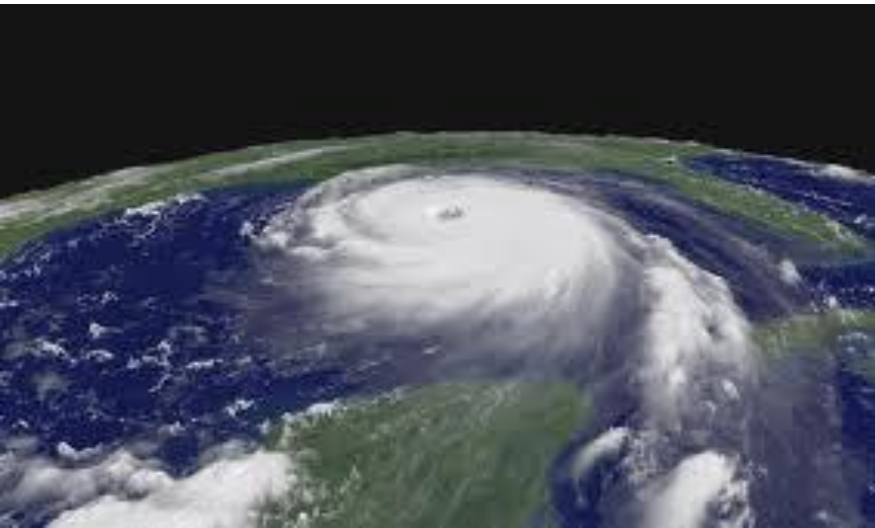
2001: 9/11 attacks – more than 2,900 dead

2002: Bali bombing – 200 dead

2004: South East Asia Tsunami – 300,000 dead

2009: Victorian (Black Saturday) Bushfires – 173 dead

2015: Japanese Tsunami – at least 15,819 dead



Regional Context

Region	Number	Victims	in %	Insured losses		Economic losses	
				in USDbn	in %	in USDbn	in %
North America	51	278	1.1%	17.3	47.1%	28.6	31.2%
Latin America & Caribbean	25	746	2.8%	3.2	8.7%	7.5	8.2%
Europe	41	2612	9.9%	6.2	17.0%	12.6	13.7%
Africa	49	3431	13.0%	0.0	0.1%	1.2	1.3%
Asia	159	18916	71.8%	7.0	19.0%	37.7	41.1%
Oceania/Australia	13	57	0.2%	2.1	5.7%	3.0	3.3%
Seas/ space	15	319	1.2%	0.9	2.4%	1.1	1.2%
World	353	26359	100.0%	37	100.0%	92	100.0%

Source: Swiss Re Economic Research & Consulting (2016)

Societal Affects of Disaster

- Loss of life / health
- Loss of shelter
- Loss of privileges
- Anger / denial
- Scapegoating Officials
- Reactive change



Rationale for Reform

- Disaster management systems and organisations continue to undergo reactive change and pressurised reform
- Deliberate and integrated reform is needed
- Acceptance that disasters happen is important

Drivers for Change

- Population increase
- Enhanced definition and reporting
- Global warming
- Urban sprawl
- Greater demand
- Terrorism / conflict



Pre-Disaster Framework

- Preparedness versus response as a focus
- Recognise that novel disasters are inevitable
- Functional and scalable arrangements are key
- Recognising pernicious traditions

Preparedness v Response

- Increasingly, the benefits of focusing upon preparing for, rather than responding to disasters is being recognised
- For every dollar spent on preparedness, five more is spent on response and recovery

Novel Disasters are Inevitable

- Novel, or out-of-scale disasters are a reality and will challenge our thinking, systems and arrangements
- The Japanese earthquake and resultant nuclear emergency and the Victorian Black Saturday bushfires, for example

Functional and Scalable Arrangements

- For effective preparedness and response arrangements, a functional (non-person dependant) approach is essential
- Plans and arrangements should be scalable so as decision making, particularly in relation to escalation, is not impeded

Framework Scaffolding

Comprehensive

- Plans and arrangements should consider all phases of a disaster and their consequences

Progressive

- The future should be anticipated and considered
- The role of the community and the need for engagement is fundamental

Framework Scaffolding

Risk-driven focus

- Proactive risk and early impact analysis are key to assigning priorities and resources

Integration

- The unity of effort and a consistent approach across layers of government and community

Collaboration

- Relationships that result in us working as one

Framework Scaffolding

Coordination

- Synchronised and effective activities and mitigation strategies

Flexibility

- Creative and innovative arrangements are required for an effective response to a disaster

Professionalisation

- Science, evidence and knowledge must inform our education, training and lessons cycle

Pernicious Traditions

- Pernicious traditions are those that continue to harm or detract, particularly in a graduated manner
- They degrade our thinking and halt innovative practice and the identification of novel solutions
- Pernicious traditions are a significant barrier to reform

Pernicious Traditions

- A focus on hazards, not consequences
- Independent operating pictures
- Decision traps Fixation with phases
 - mitigation, response, recovery
 - prevention, preparedness, response, recovery
- Desire for a sense of order

Pernicious Traditions

- Inconsistent approach to the coordination of response and recovery
- Lack of error based learning
- Reliance upon arrangements, not innovation
- Implementing recommendations, not lessons
- Inconsistency in education and exercising

World Trade Centre (2001)



Overcoming Pernicious Traditions

- Shift beyond hazard type planning and response
- Join up the approach to situational awareness
- Manage every significant disaster as new
- Attempt to recognise a crisis for what it is
- Conduct response and recovery concurrently
- Schedule a forward program of reviews

Overcoming Pernicious Traditions

- Allow and tolerate a degree of error, both during an exercise and a disaster
- Focus equally on response and recovery
- Recognise reviews and focus on imbedding lessons, not recommendations
- Routinely exercising capability and arrangements, using variable circumstances
- The implementation of a Red Team

Summary

- A focus on a pre-disaster framework will enhance and promote post-disaster resilience
- Novel disasters are inevitable and will happen

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