Using Lessons from Earthquakes in Haiti and Chile to Reduce Global Risk

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March 1, 2011 -- Workshop
An Uncomfortable but Necessary 21st Century Task:

Comparative Lesson Drawing
(Haiti, Chile, and … New Zealand)

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“Tornadoes always find trailer parks”

The reality underlying the humor:
Hazard x Vulnerability = Risk

“The H just is, but the V -- and thus the R -- are on us”
That is, we create our own risks

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“It’s on us”

What we build, where we build, and how we build are political-economic decisions … and non-decisions
The Global Context for Risk: World Population
in 1900: 2 billion±, majority rural
in 2010: 7 billion±, majority urban

How life safe do you believe those 7 billion people are right now, every day and every night?
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Haiti, January 12, magnitude 7.0, depth 8.1 miles. Principal Impact Zone: Port-au-Prince, 15 miles from epicenter, 240,000+ killed, >8.0%

Chile, February 27, magnitude 8.8, depth 21.7 miles. Principal Impact Zone: Concepción, 65 miles from epicenter, ±560 killed/missing, <0.2% (earthquake and tsunami).

New Zealand, (1) September 3, magnitude 7.0, depth 3.1 miles, Principal Impact Zone: Christchurch, 30 miles from epicenter, zero killed; (2) February 22, 2011, magnitude 6.3, depth 2.5 miles, Principal Impact Zone: Christchurch, 3 miles from epicenter, ±250 killed, <.07%.

What The ... Is Going On Here?

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The UN’s Human Development Index (HDI)
Haiti 149/182, Chile 44, New Zealand 20 (low number is good)

FH’s Failed State Index (FSI) – “Governance”
Haiti 12/177, Chile 155, New Zealand 171
(low number, not so good)

TI’s Corruption Perceptions Index (CPI)
Haiti 149/180, Chile 25, New Zealand 1 (low number is good)

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Ranks on the UN’s Human Development Index (HDI) 2009

#1 (Norway) #20 NZ #44 Chile #149 Haiti #182 (Niger)

Ranks on the Freedom House Failed State [Governance] Index (FSI) 2009

#177 (Norway) #171 NZ #155 Chile #12 Haiti #1 (Somalia)

Ranks on Transparency International’s Corruption Perceptions Index (CPI) 2009

#1 NZ #25 Chile #149 Haiti #180 (Somalia)

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The Political Economy of Risk Reduction: Let’s Stop Dancing

Development matters: “auto compliance”
Governance matters: enforced compliance
Corruption matters: limited exceptions
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The Goal of Risk Reduction:
Catastrophe → Disaster → Emergency

Risk-Aware Land Use and Design and Construction Standards/Practices
+ Compliance (Not Just Paper)

No more of “Stuff just goes up”

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Eyes Wide Open, However, to Issues of:

Sovereignty
Political Accountability
Governance Capabilities

Thank you!

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Well, now that you asked ….

Cities to worry about: Lima-Callao, Peru; Santo Domingo, Dominican Republic; Caracas, Venezuela; Kingston, Jamaica; Istanbul, Turkey; Tehran, Iran

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Killed: no more than 1% of PIZ population?
Injured: no more than 3% of PIZ population?
Homeless: no more than 5% of PIZ families?
Critical Facilities: no more than 5% inoperable in PIZ after 24 hours?
Infrastructure: no more than 5% inoperable in PIZ after Day 7?

Are we ready to bite this bullet, publicly?

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