



Building regulation for Disaster Risk Reduction in Low and Middle-income Countries

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Why initiating a global building regulatory reform program for disaster risk reduction?

- ❑ Cost of disasters threatens development agenda
- ❑ Building regulations support several development goals
- ❑ Sendai Framework for Action (2015-2030) creates opportunity for deeper international effort in expanding regulatory capacity

A dramatic increase of urban risks worldwide without effective regulations

❑ Increased vulnerability

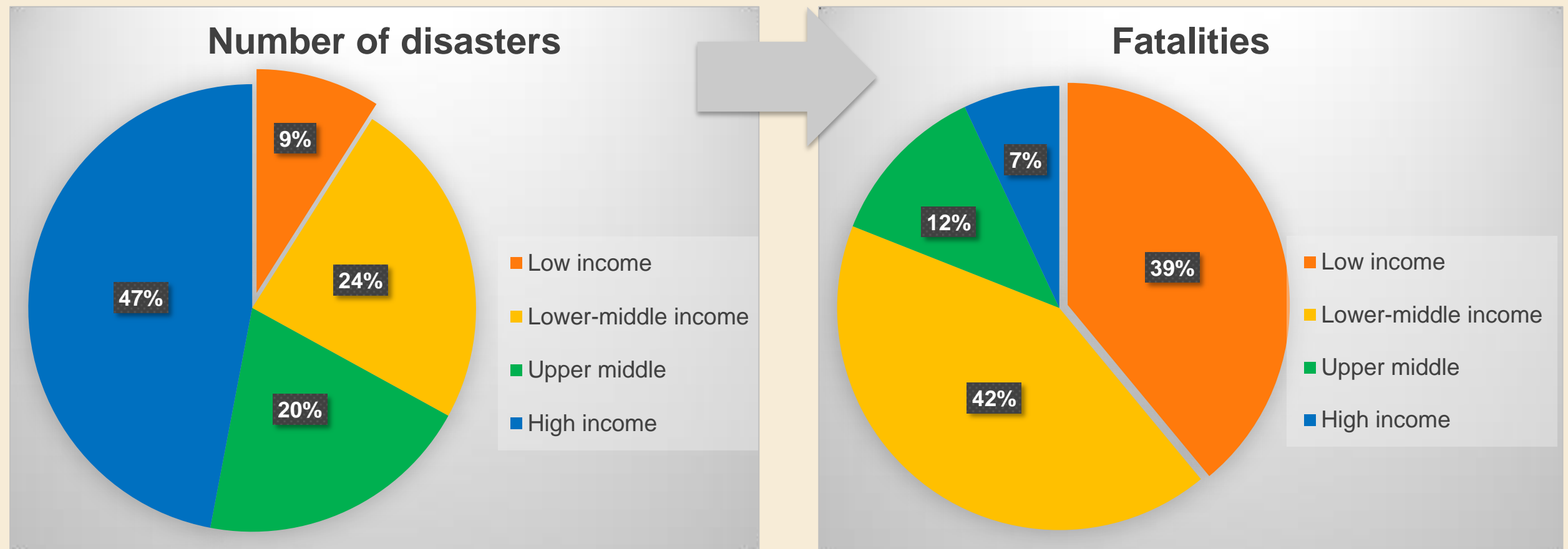
No of people exposed to cyclones and earthquakes in large cities, globally (millions)

	2015	2050
Cyclones	310	680
Earthquakes	370	870

❑ Building stocks to double by 2030

Disasters target the poor

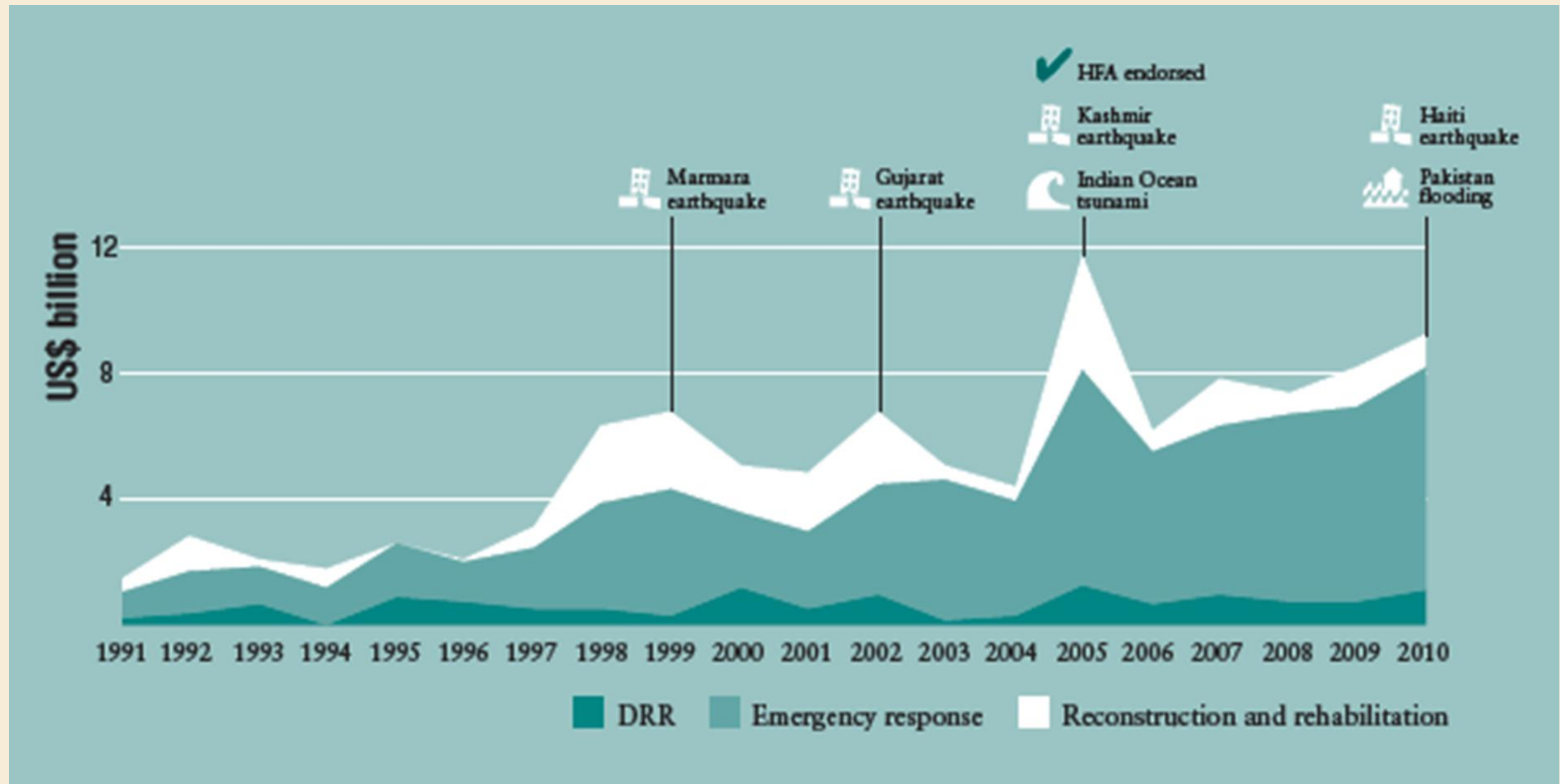
Distribution of the number of disasters and fatalities across high, middle and low-income countries in the last 30 years



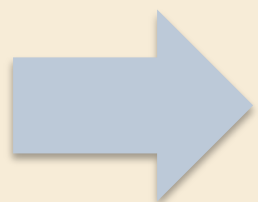
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US\$1.2 trillion in losses in last 30 years = 1/3 of global development assistance

An ounce of prevention...

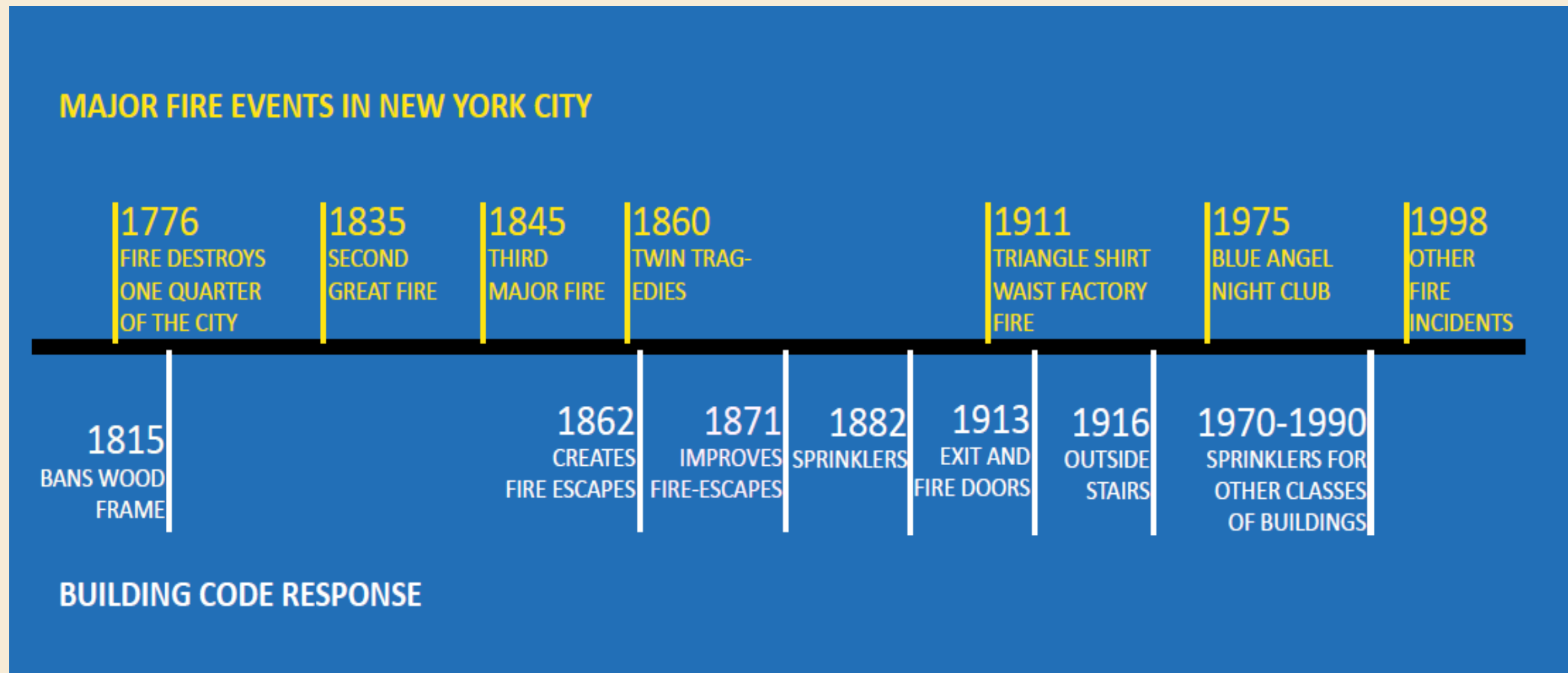


Source: Financing Disaster Risk, 2013, GFDRR - World Bank



For every \$100 spent on development, only 40 cents were invested in disaster risk reduction between 1991 and 2010

Building regulations, the most effective way to reduce chronic and disaster risks



World Bank

At a cost of about 1% of construction cost, on average, in developed countries (Source: Doing Business Report)

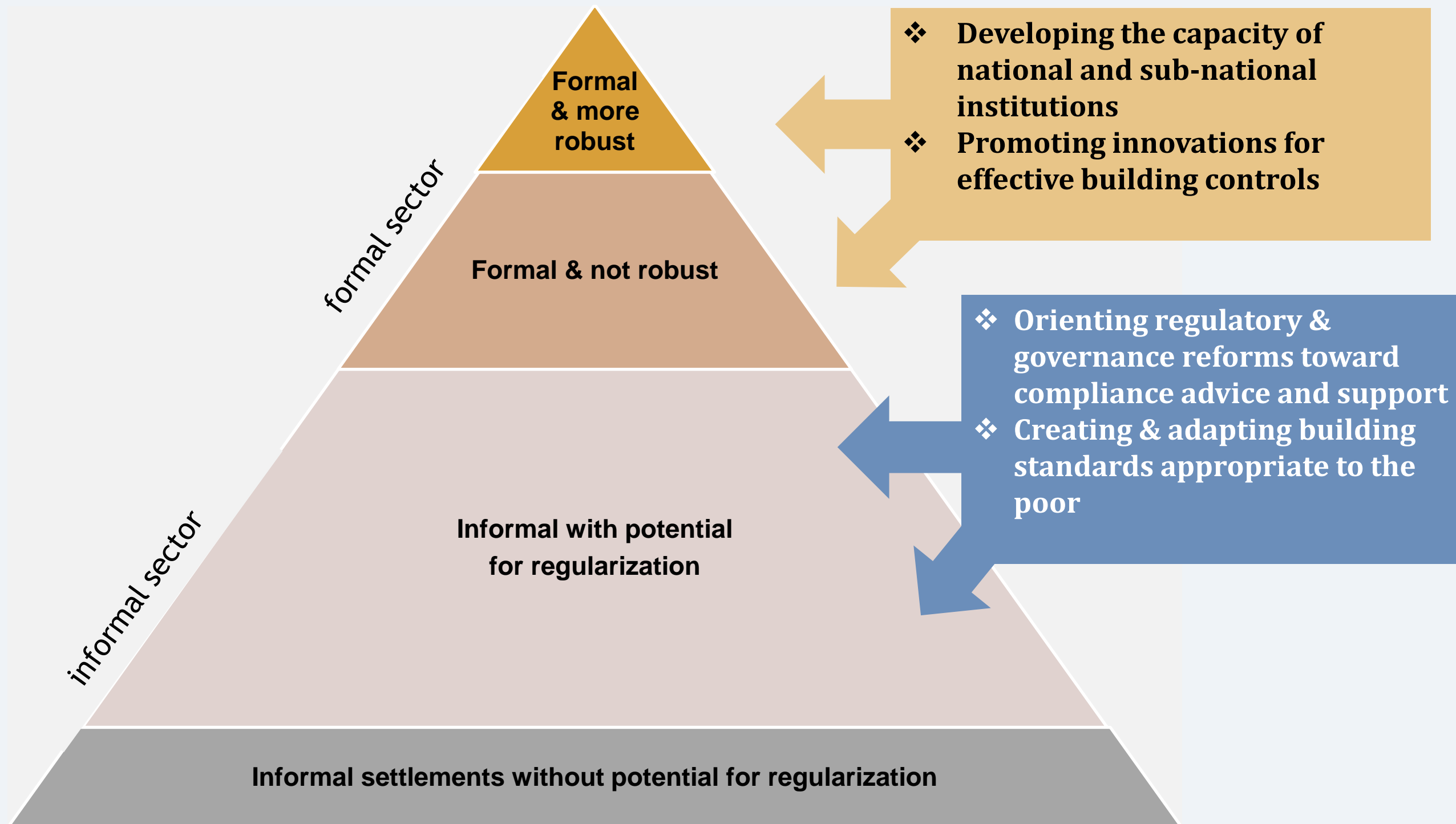
Why Building regulation has not reduced disaster risk in low and middle-income countries

“Building Regulation for Resilience” (October 2015)

Major challenges

- Ineffective land use and land governance systems
- Weaknesses in building code administration and institutional capacity
- Insufficient legislative foundation
- Unaffordable compliance costs associated with technical standards
- Limited recognition of prevalent building practices
- Dysfunctional regimes of building controls
- Corruption and regulatory capture

Priorities for a proposed building regulatory reform agenda



A program to support the Sendai Framework for Disaster Risk Reduction 2015-2030

Limiting the creation of new risks and reducing existing risks in the built environment in low and middle income countries

Component 1

**National-Level
Legislation & Institutions**

National level intervention

Develops the national enabling legal and administrative framework for the establishment and enforcement of land use and building regulations.

Component 2

**Building Code Development
& Maintenance**

National and municipal level intervention

Sets out minimum requirements for safe construction of new buildings and retrofit of existing buildings. Creates permanent updating mechanisms and incorporates updated risk hazard assessments.

Component 3

Local Implementation

Municipal level intervention

Supports the introduction of building code implementation mechanisms such as plan reviews, inspections, and permitting, as well as training of engineers and builders.

Component 4

**Knowledge Sharing &
Measurement**

International level intervention

Contributes to effective international effort to promote knowledge of good practice and supports measurement of risk reduction in construction.

Country-level interventions

Thank you

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