

Health system design and “natural” disasters

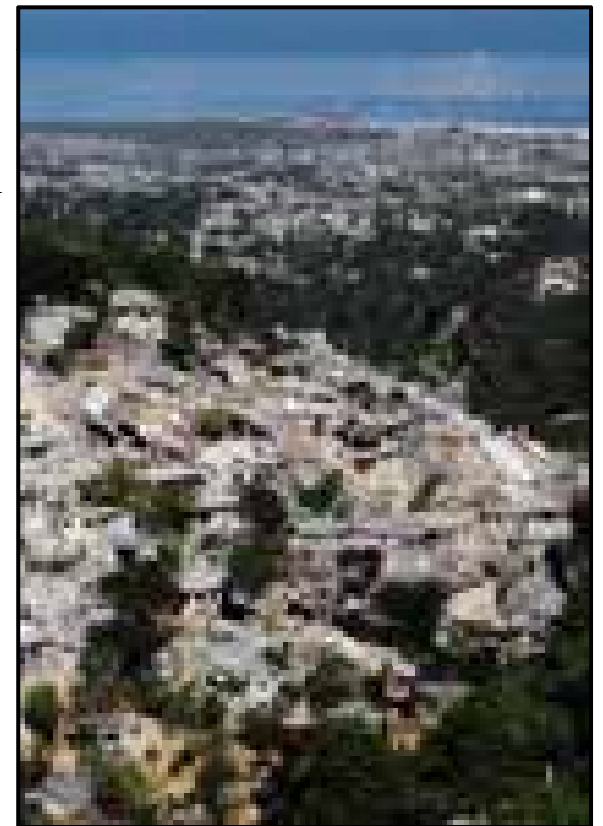
Lessons from Haiti and Rwanda



Paul Farmer, MD, PhD
Harvard Medical School
Brigham and Women's Hospital
Partners In Health

“The Current Situation
of Health in China”

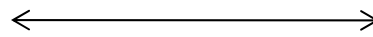
Harvard Center Shanghai
May 8, 2012



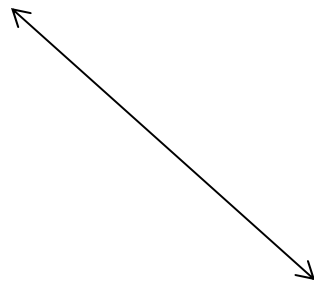
Health system design in the 21st century



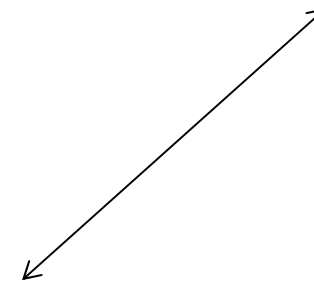
Community-based



Hospital-linked



Health center-enriched



China's Cooperative Medical System

“Barefoot doctors”

- Primary health care, including control of vaccine-preventable and vector-borne diseases
- Sanitation
- Life expectancy:
 - 35 years in 1952
 - 68 years in 1982
- 1980s economic reforms affect coverage?
 - 1979: 80-90% covered by CMS
 - 1984: 40-45%

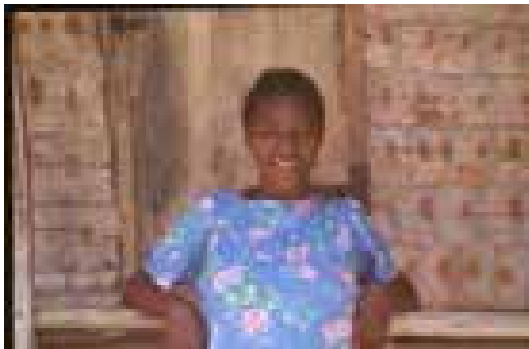


Accompaniment

A cornerstone of care



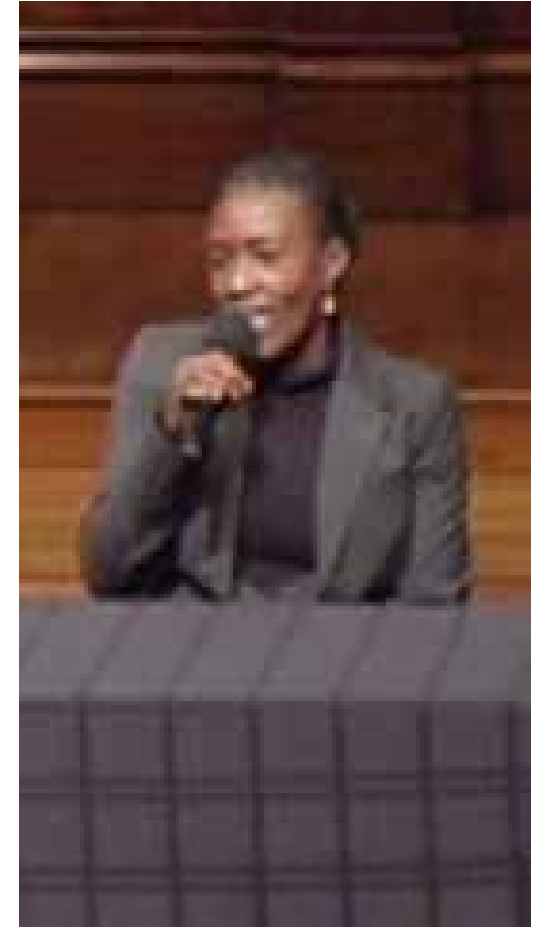
June 1999



1 year later



With *accompagnateur*



10 years later

Public-private partnerships

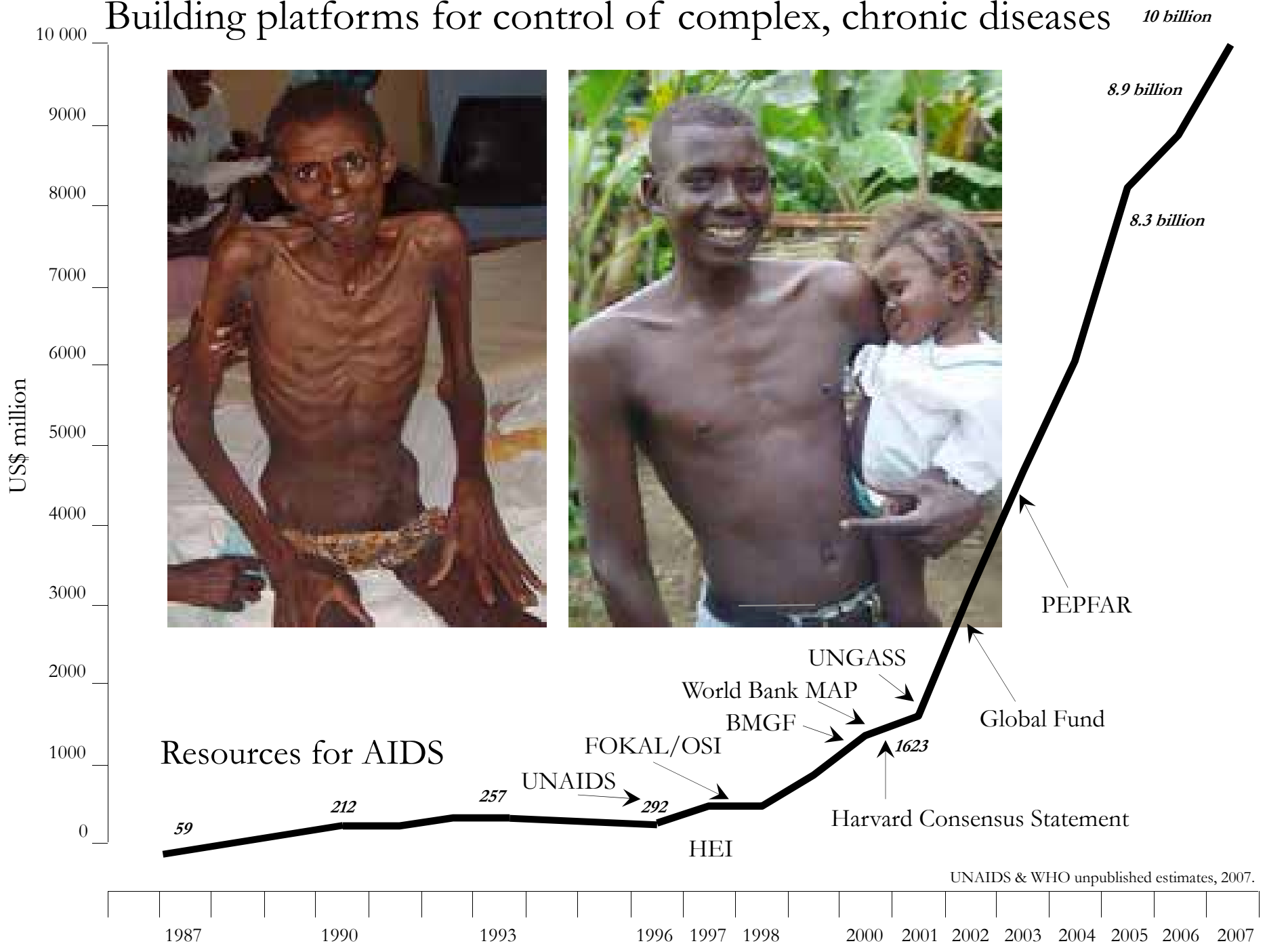
Boucan Carré, 2003



Public-private partnerships



Building platforms for control of complex, chronic diseases



From Haiti to Rwanda



(Re)building infrastructure

Rwinkwavu, 2005



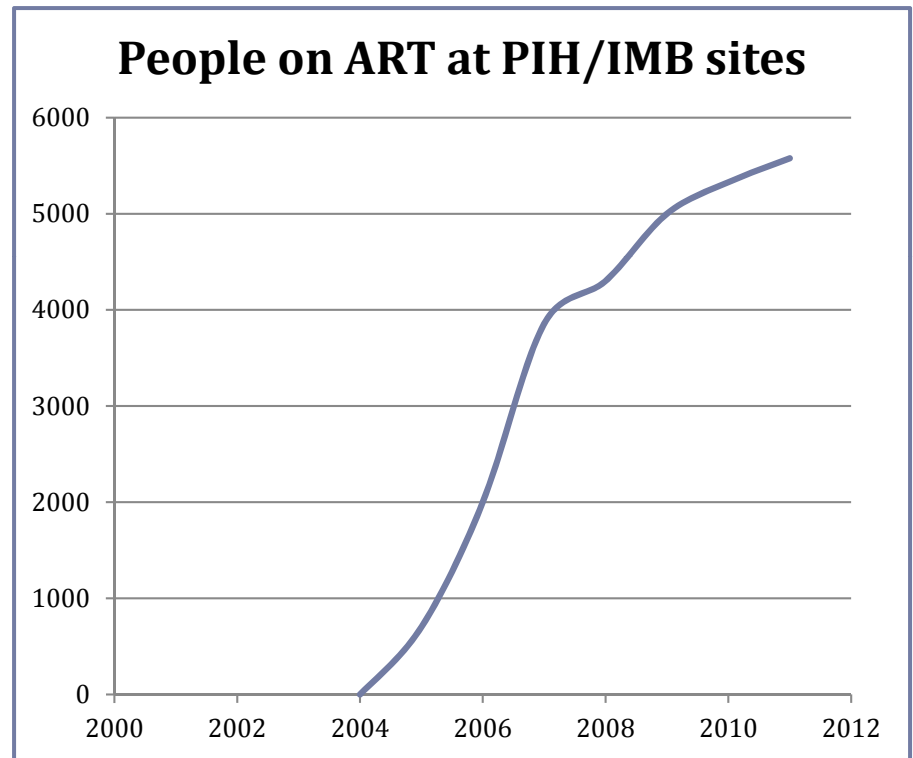
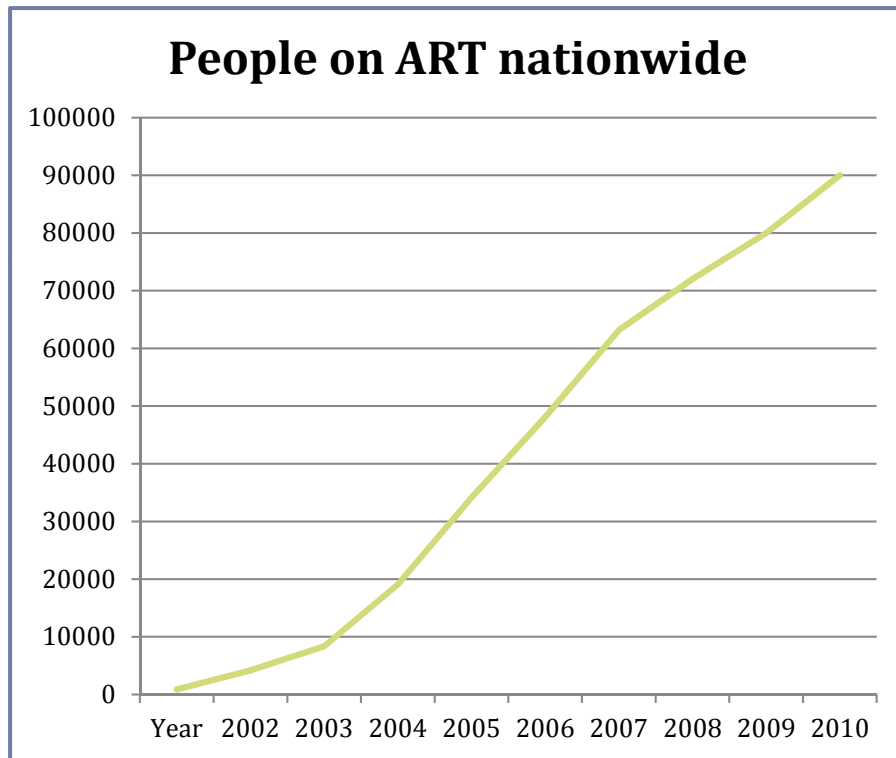
(Re)building infrastructure

Butaro, 2011



GoR covered 25% construction costs and 48% operating costs

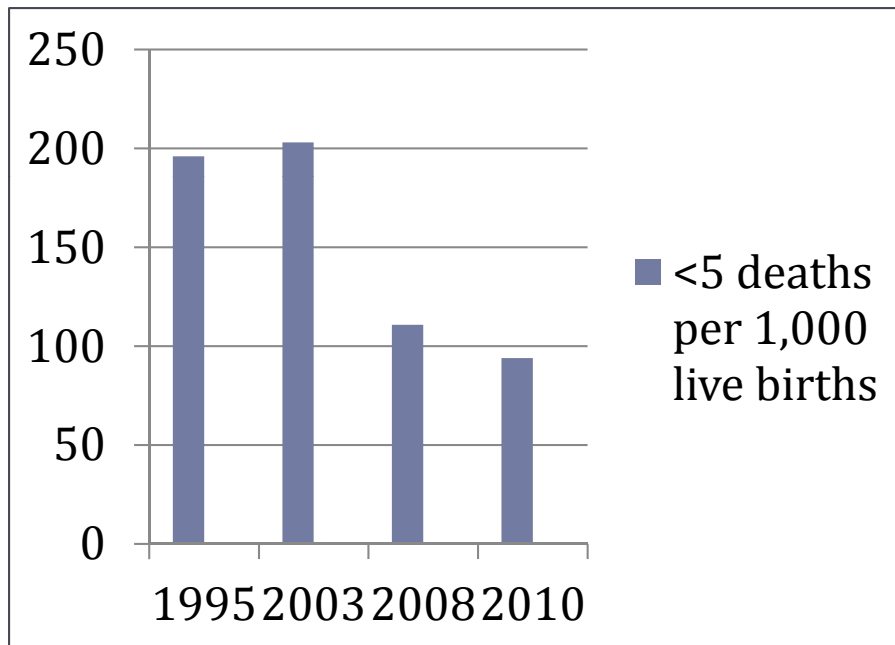
Horizontal, vertical, diagonal



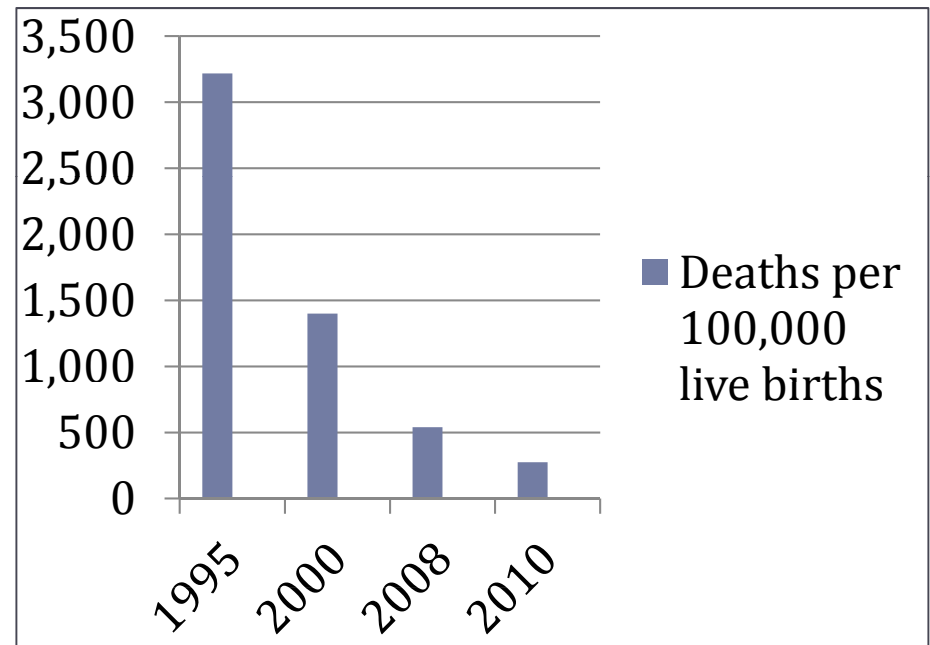
More than 90,000 Rwandans on ART (>80% of PLWA)

Horizontal, vertical, diagonal

Child mortality

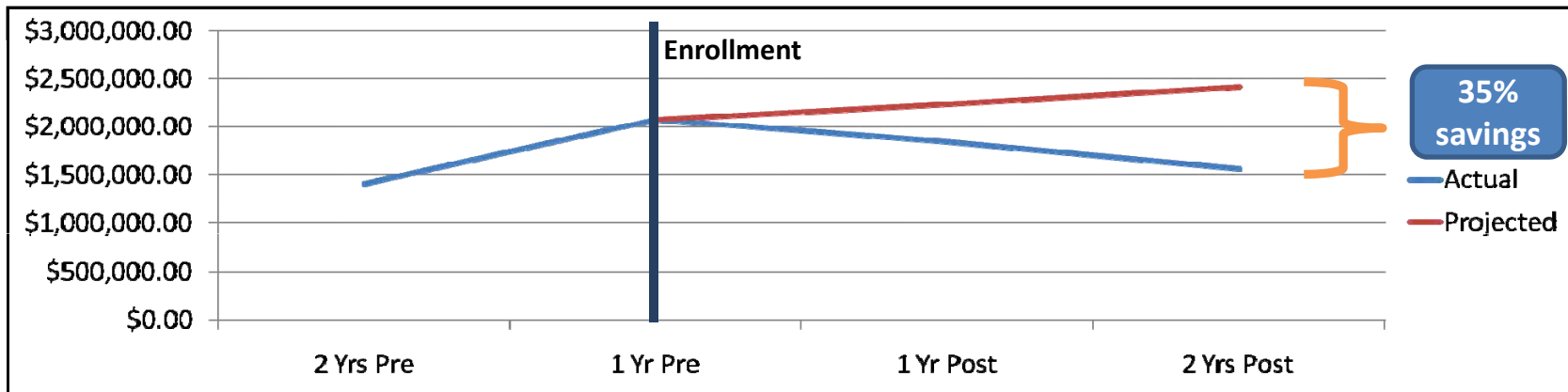


Maternal mortality

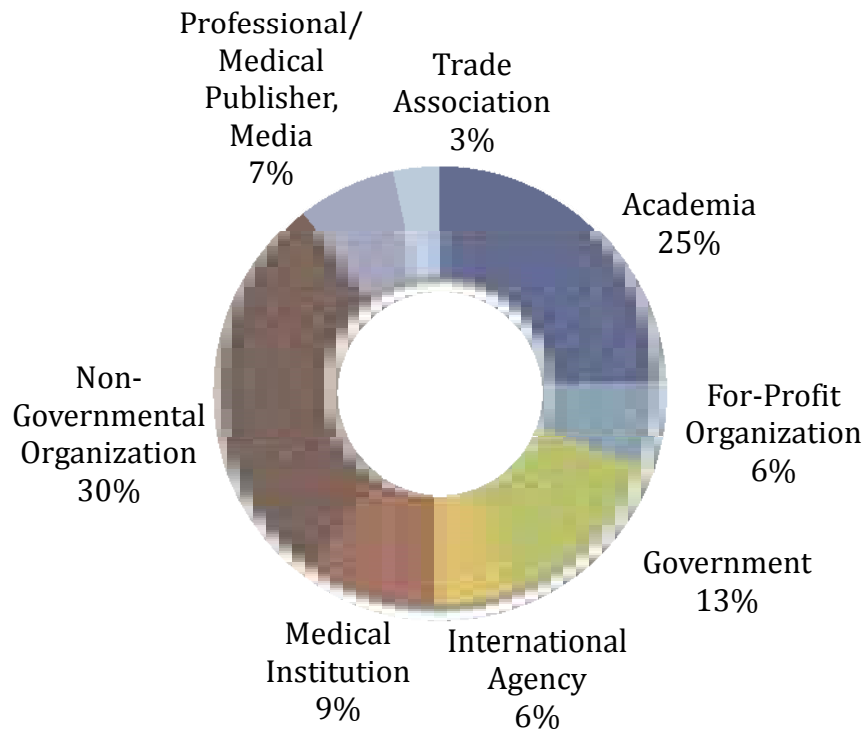


Platforms for control of complex, chronic diseases

PACT: community-based care in the U.S.



Global Health Delivery



More than 6,800 members representing more than 2,149 organizations across 158 countries

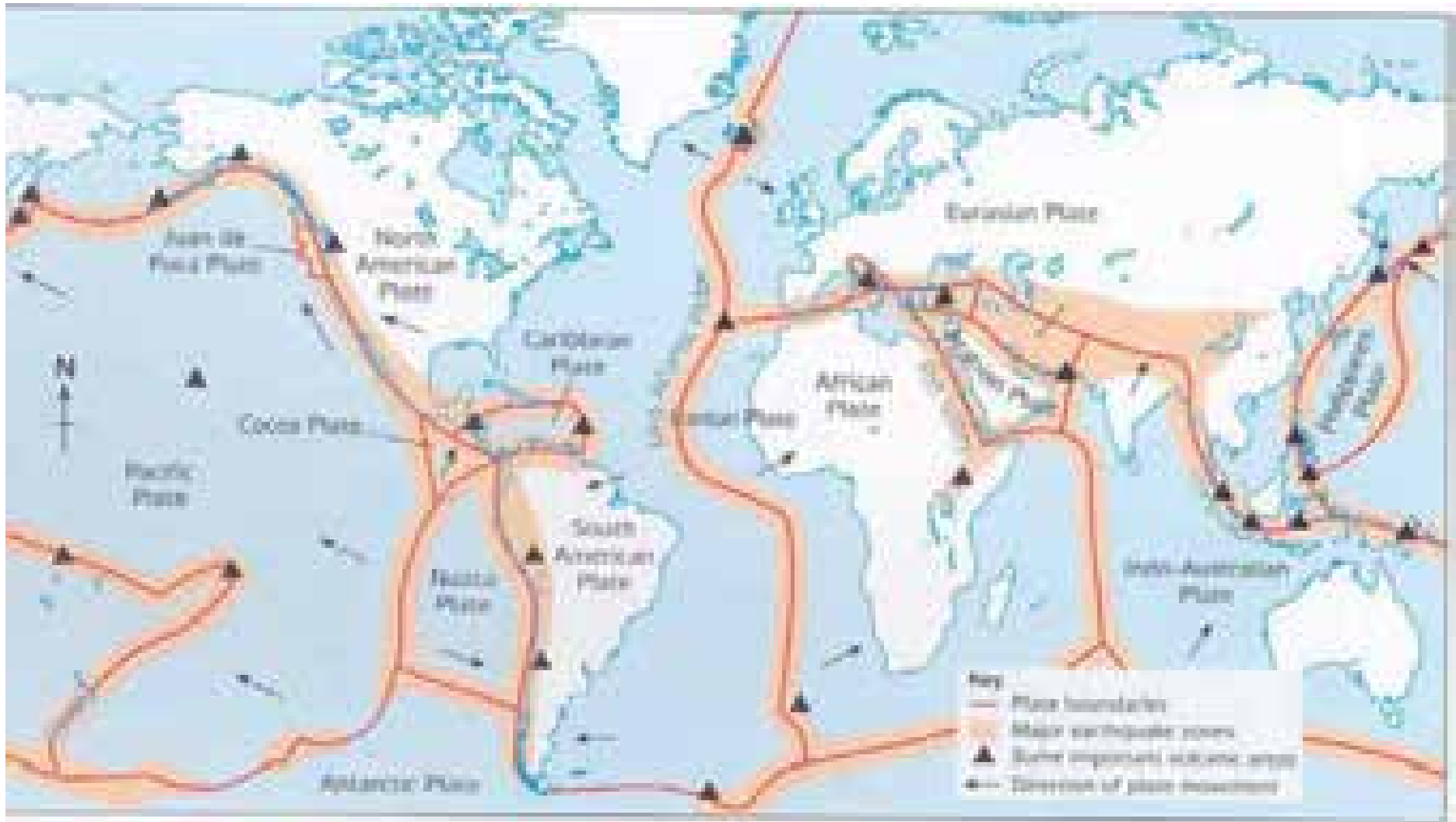


Partners In Health, 2012



Research, Training, Service

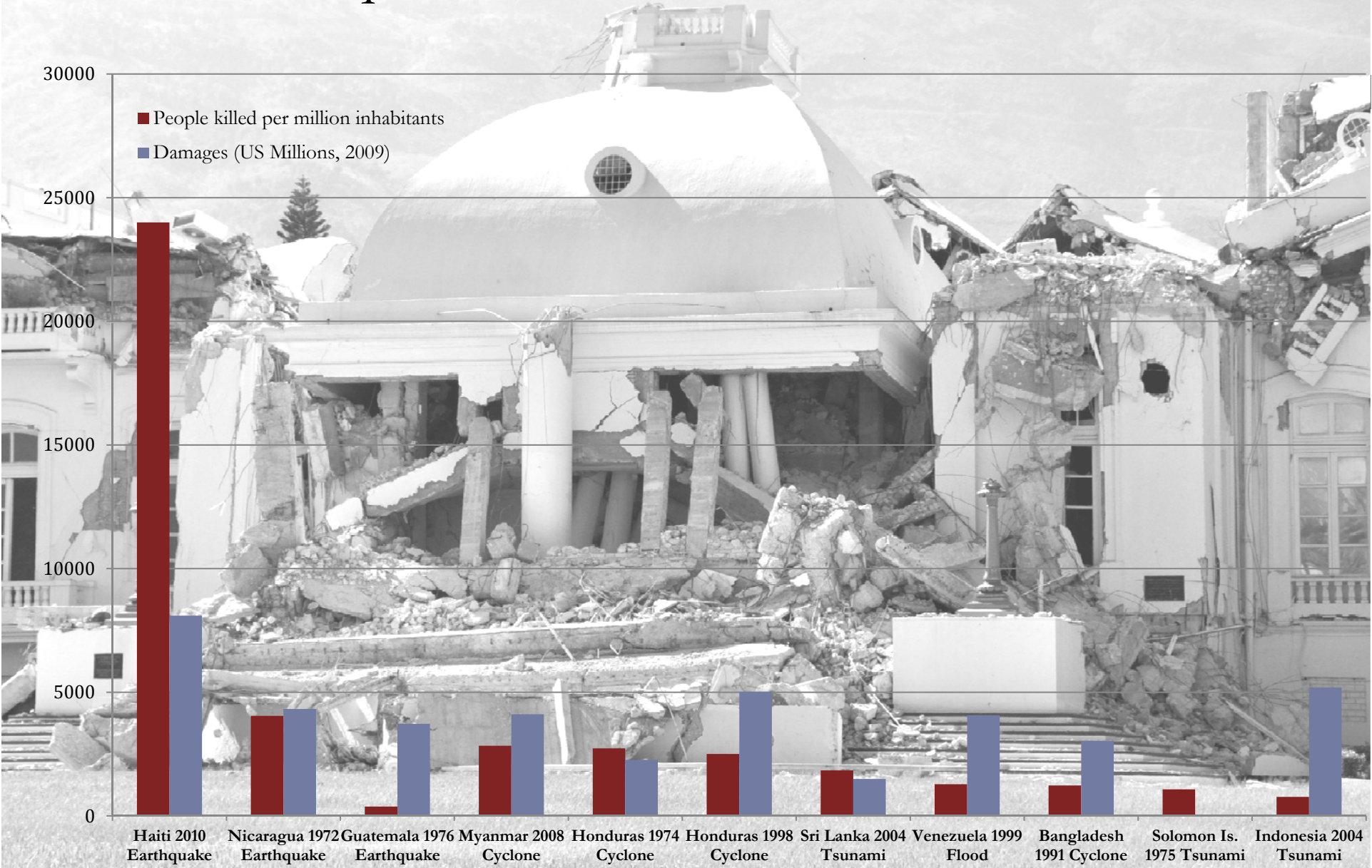
“Natural” disasters and the limitations of health system design



“Natural” disasters and the limitations of health system design
General Hospital nursing school collapse



Haiti's earthquake in context



Cavallo E., A. Powell, and O. Becerra, "Estimating the Direct Economic Damage of the Earthquake in Haiti," Inter-American Development Bank Working Paper Series #IDB-WP-163, 2010.

Haiti earthquake: acute response

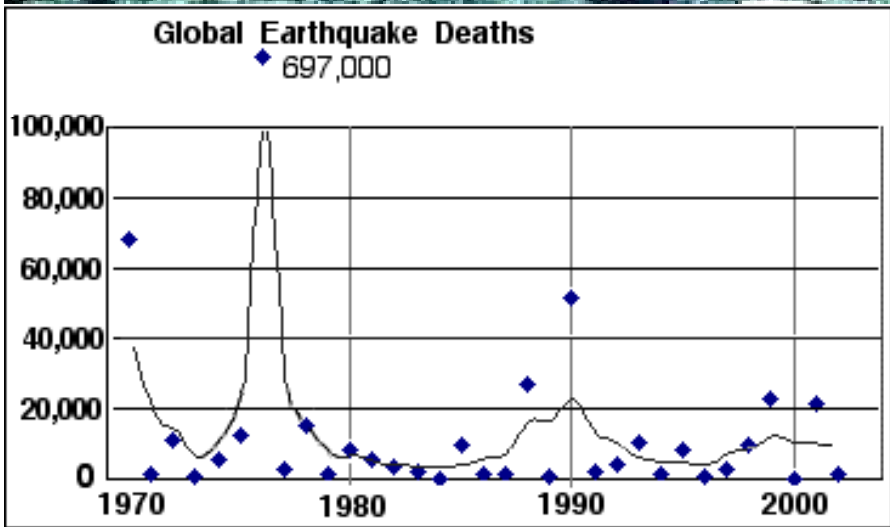
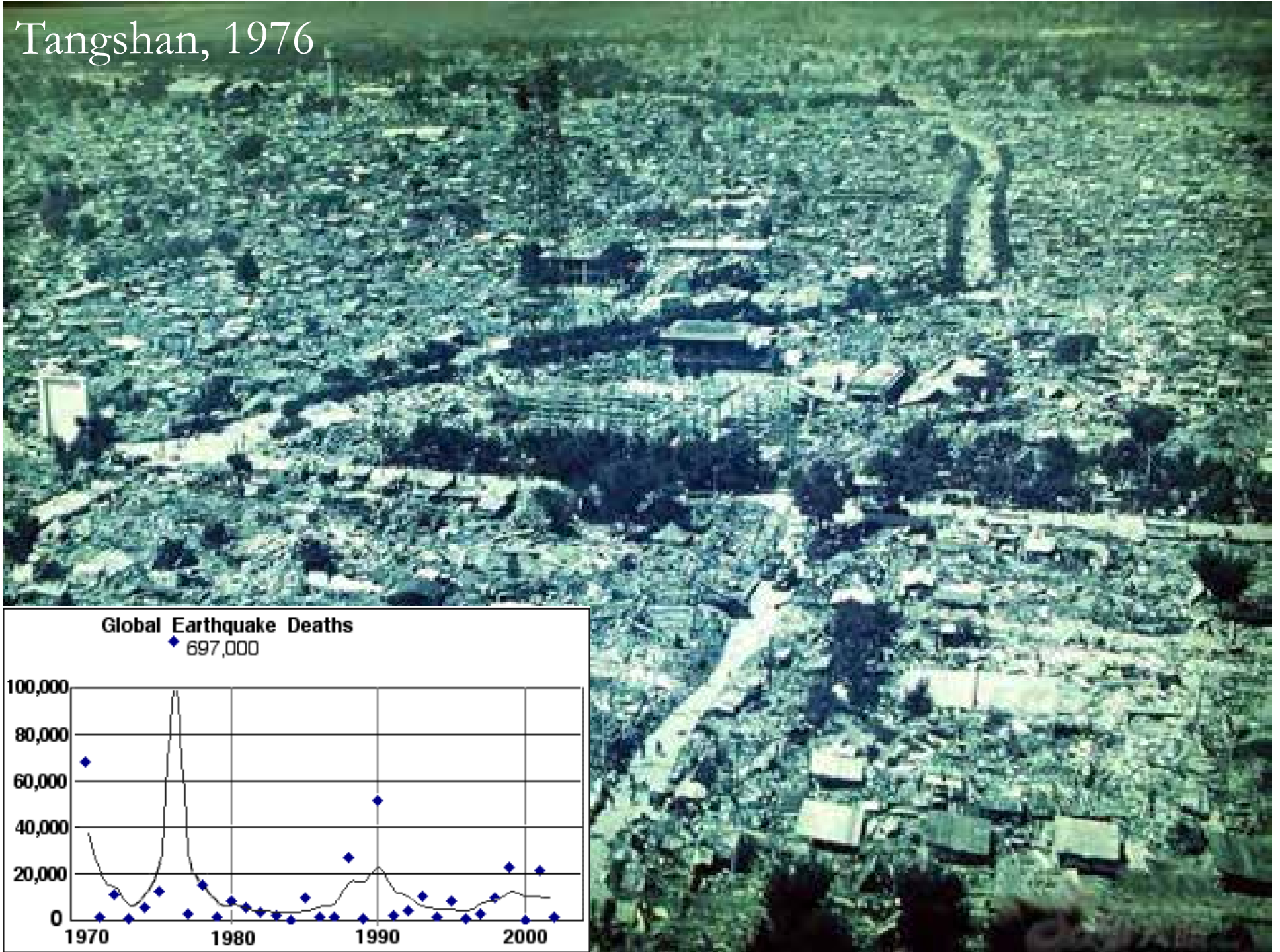


Diagnosis: acute-on-chronic

- Over 3 million people affected by earthquake
- At peak, 1.3 million in resettlement camps
 - ▣ April, 2012: ~450,000 still in camps



Tangshan, 1976



Sichuan, 2008



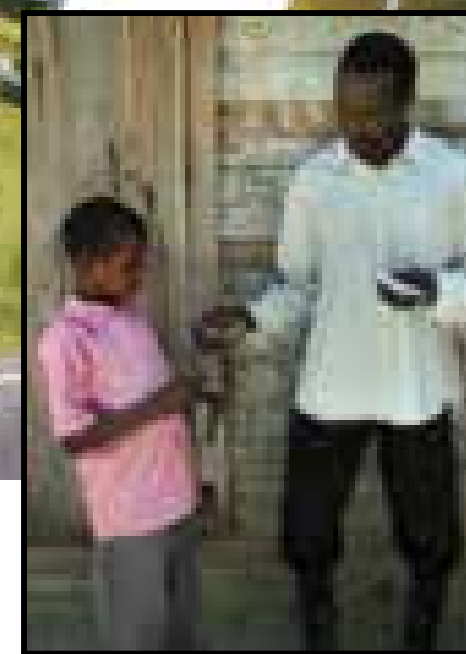
Disasters natural and unnatural

Sichuan, 2008

- >150 aircraft mobilized: largest non-military airlift in Chinese history
- Total damages estimated ~\$20 billion; overall economic costs ~\$75 billion
- GDP per capita: \$4,046 (2011, 24th out of 31 Provinces)



Building back better
Mirebalais Hospital, 2012



**INTERIM
HAITI
RECOVERY
COMMISSION**