



# Policy Dialogue on Building Resilience to Natural Disaster and Major Economic Crises

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Building Resilience to  
Natural Disasters and  
Major Economic Crises





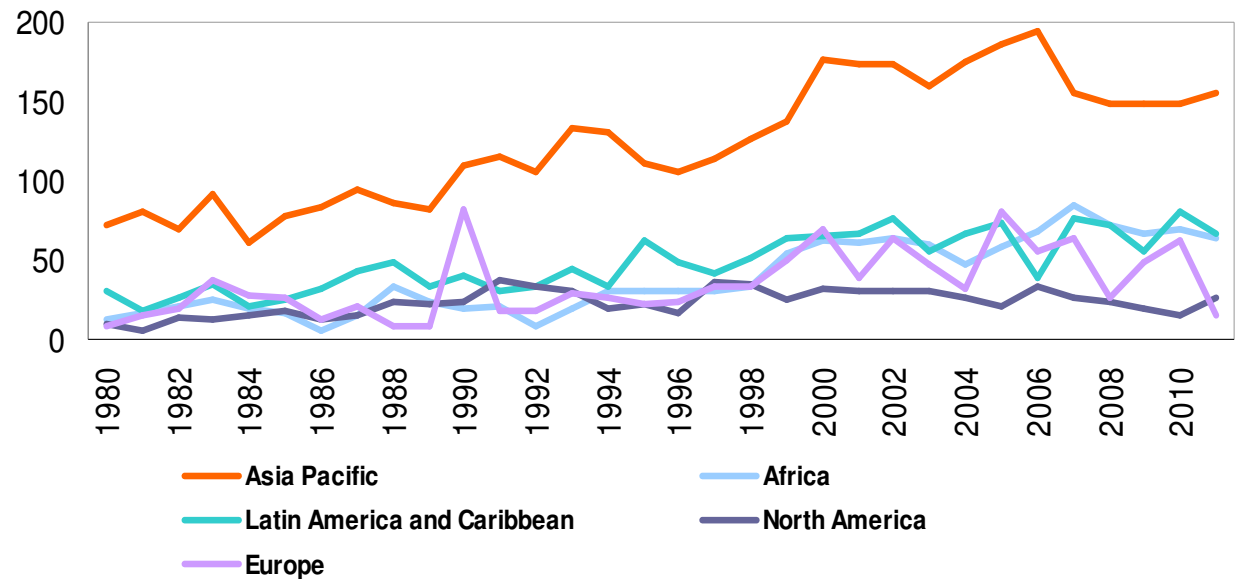
## What is resilience?

*“The capacity of countries and their people to withstand, adapt to, and recover from natural disasters and major economic crises—and to continue to lead the kind of lives they value.”*



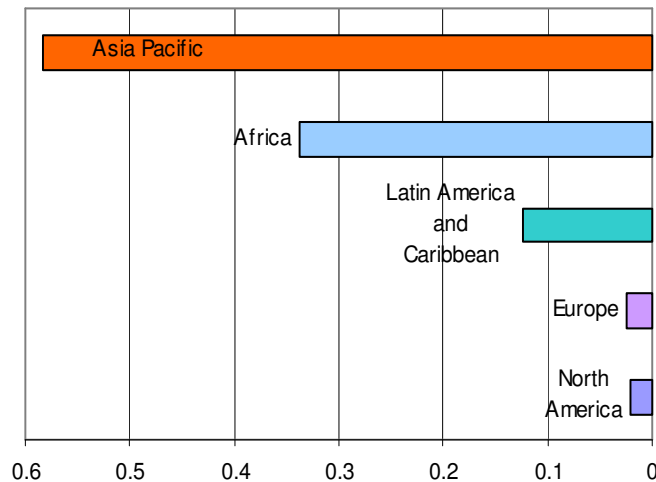
- Asia-Pacific is the most disaster prone region in the world

Disasters by region (1980-2011)

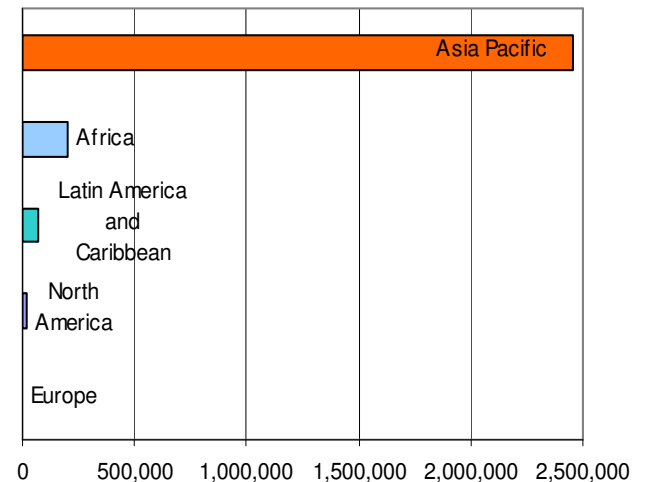


- ...and the most affected

People affected (per 1,000 population)

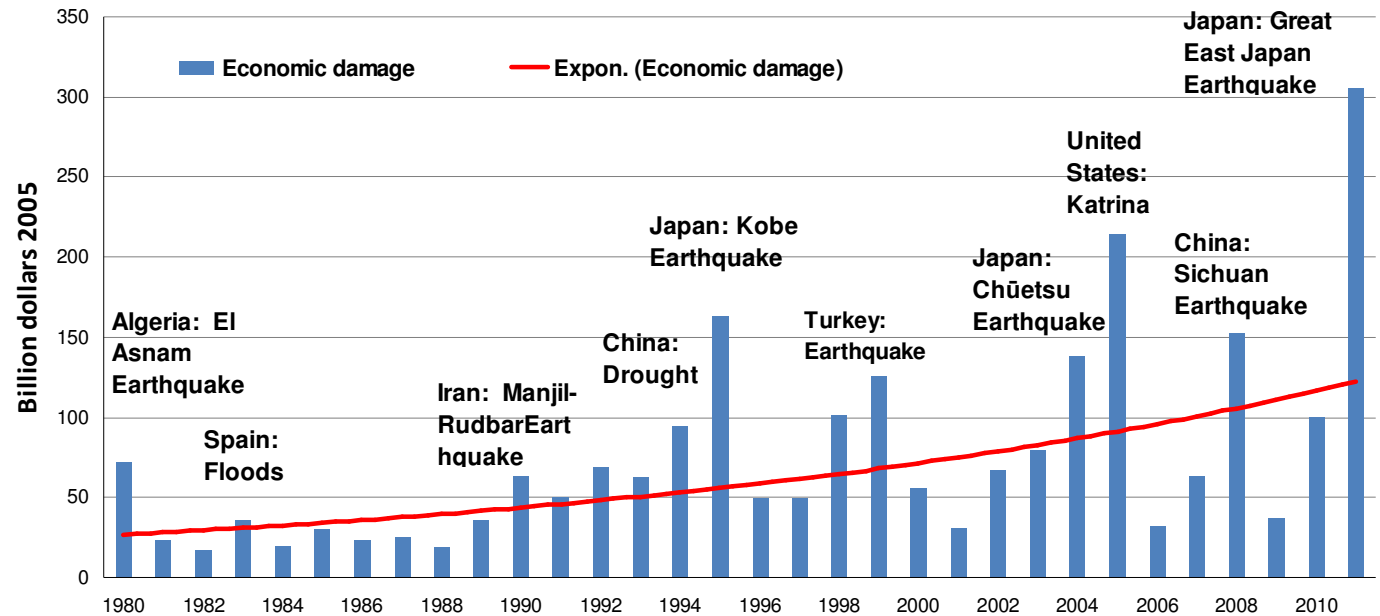


People affected

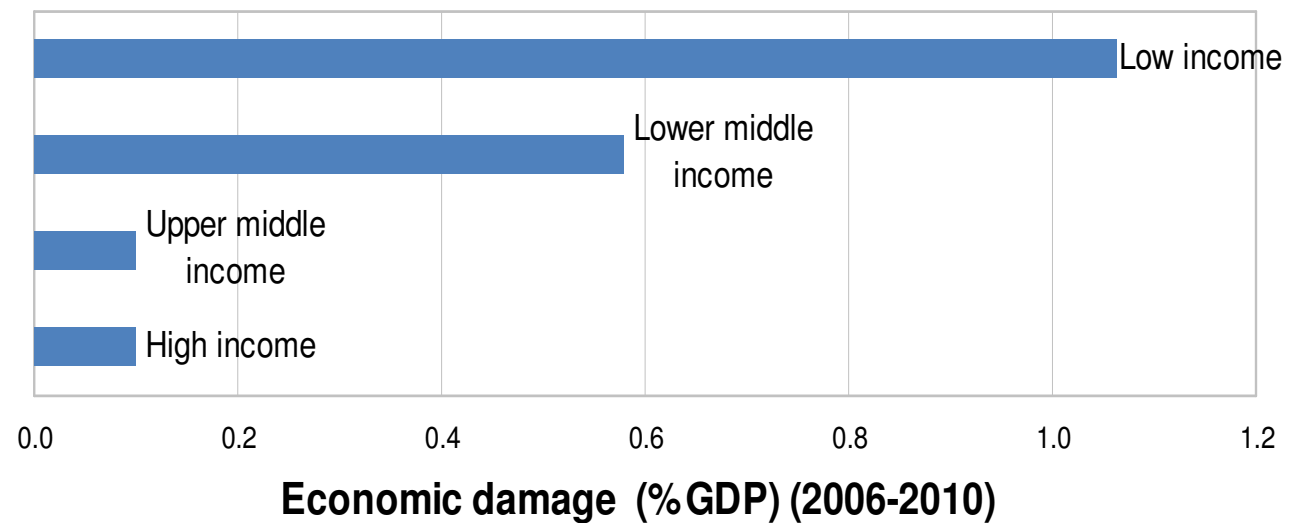




- Economic losses from disasters are rising globally



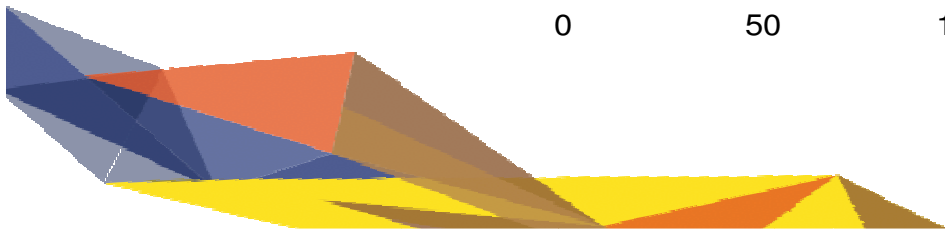
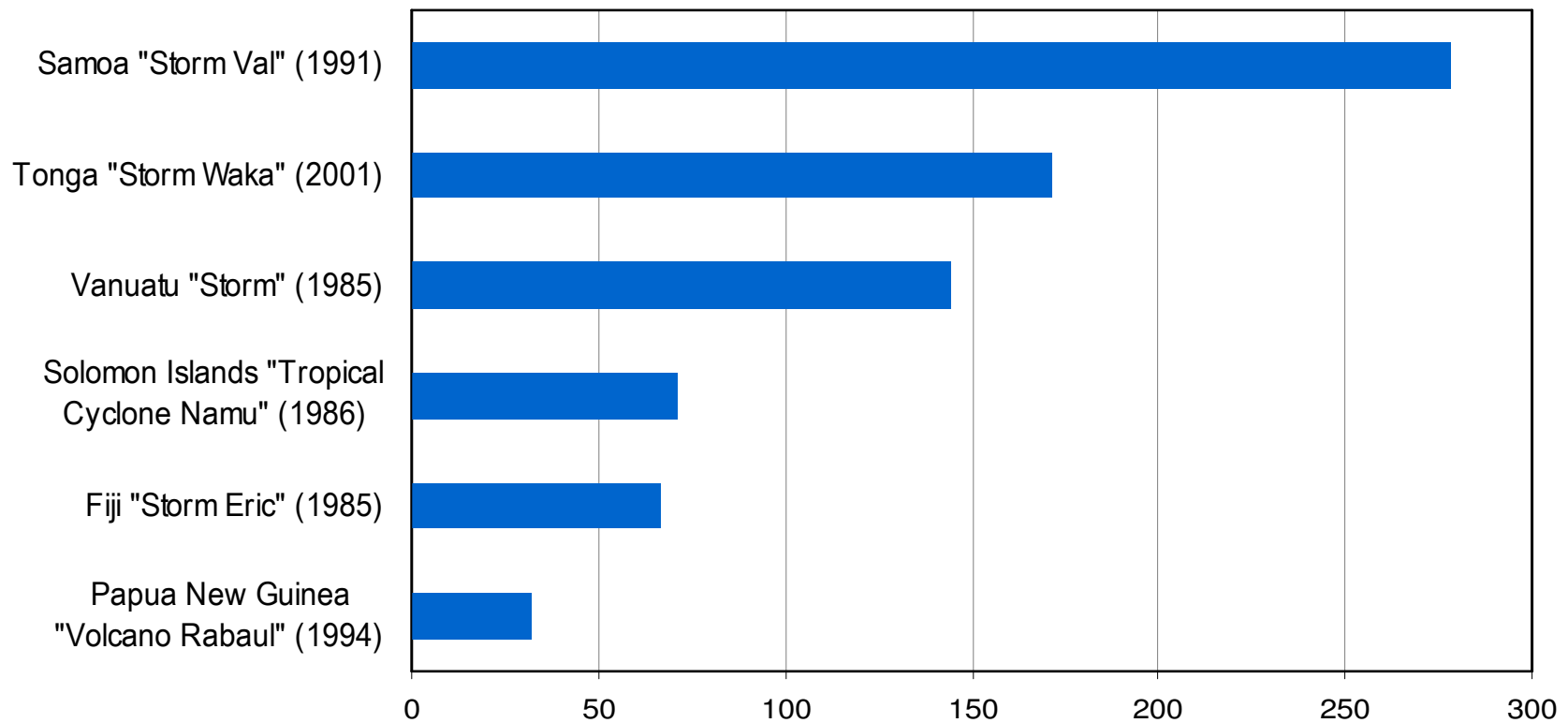
- ...and low-income countries are the most affected





# For small island countries, damages are multiples of an economy's size

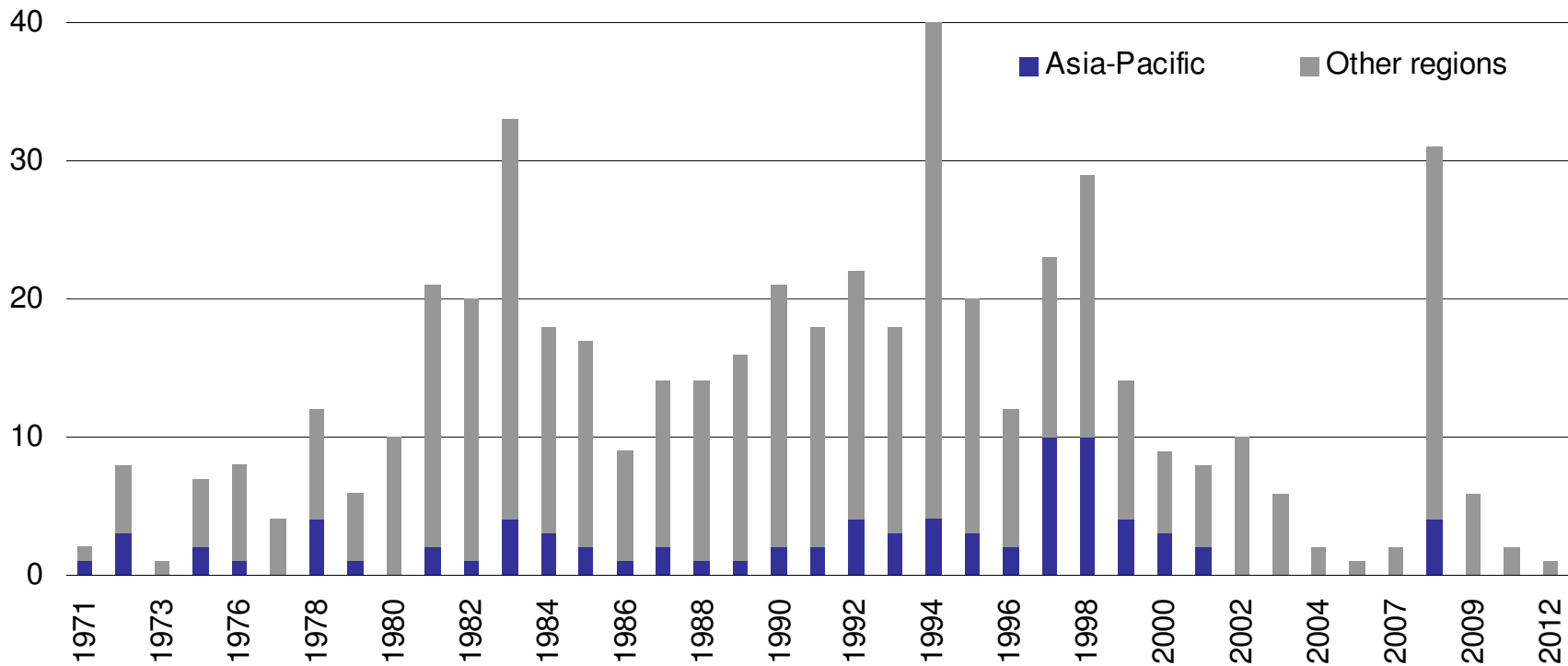
Economic damage (% GDP)





# Though Asia-Pacific has not been breeding grounds for financial crises....

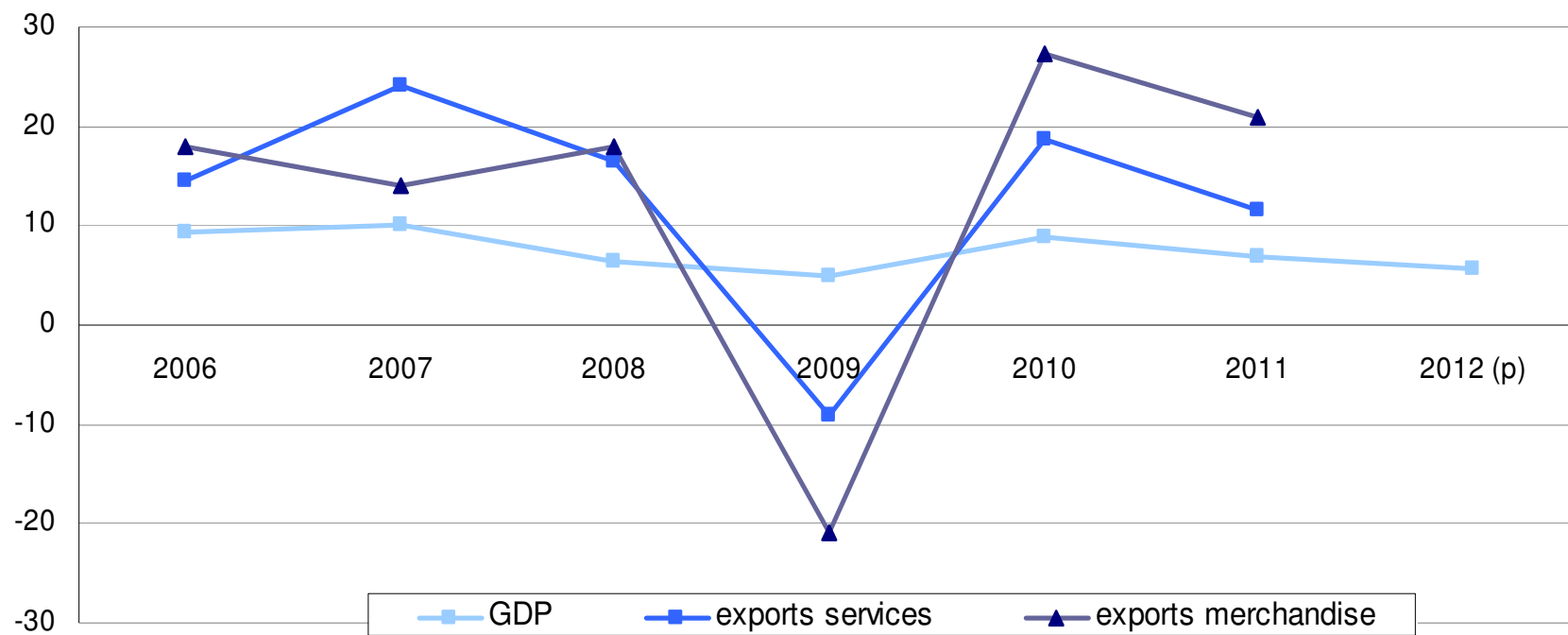
Number of financial crises starting in a given year, period 1971-2012





# The region has been hit hard

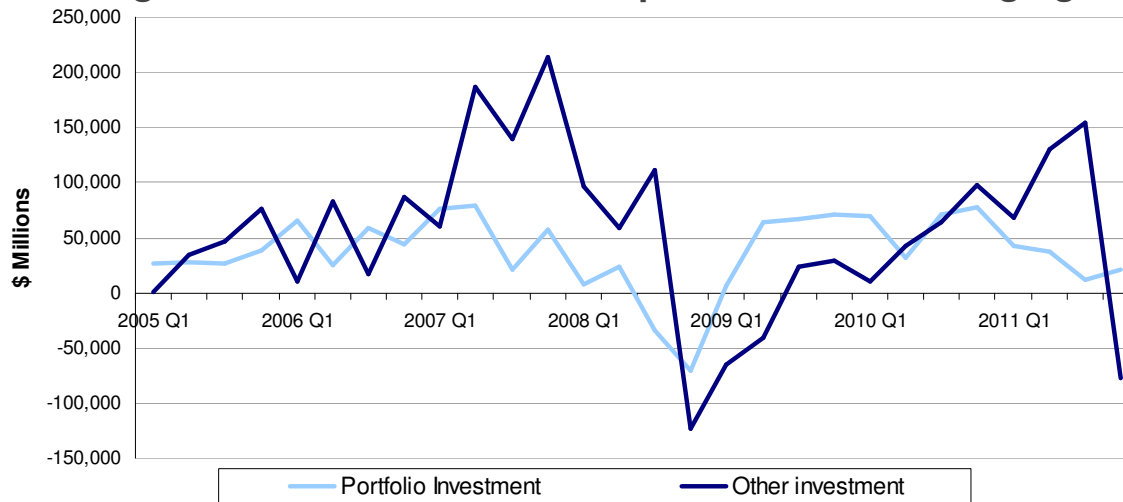
Growth rates of GDP and exports of Developing Asia-Pacific (percentage)



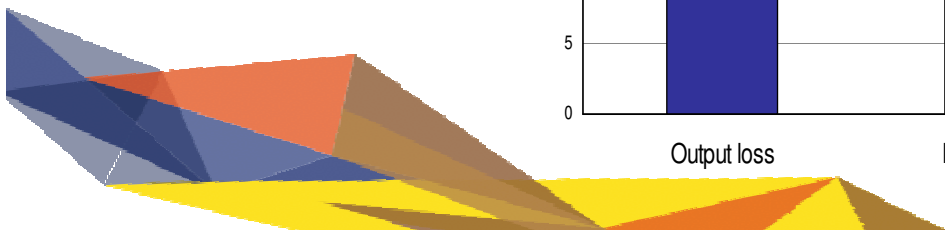
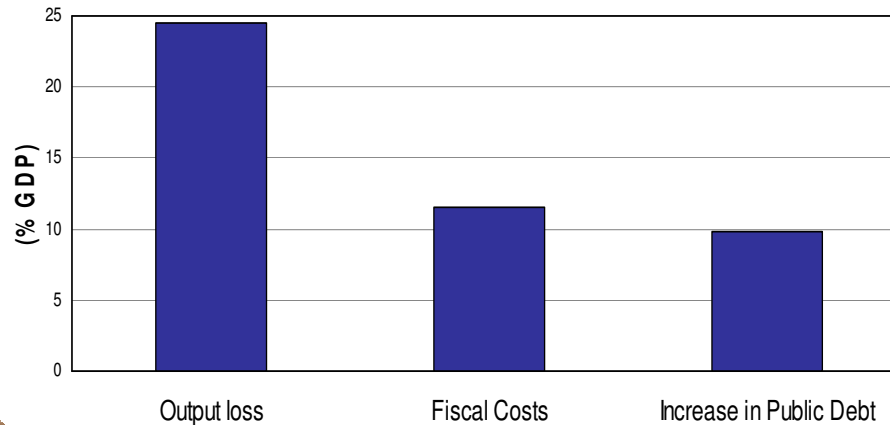


# Greater financial integration increases risk of cross-border transmission of shocks

### High and volatile short term capital inflows to emerging Asia-Pacific

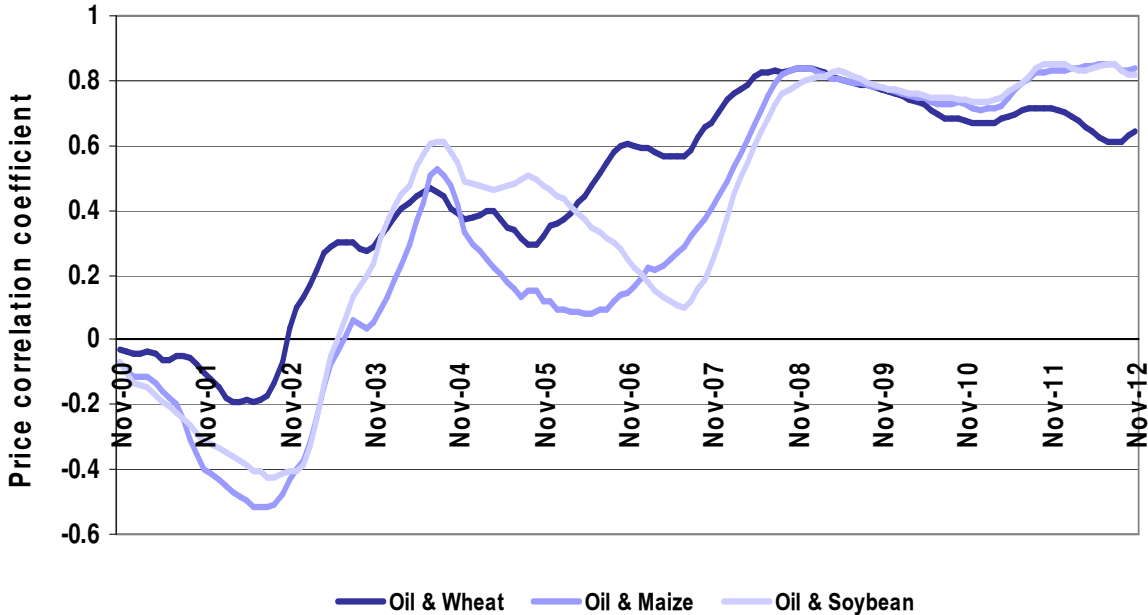
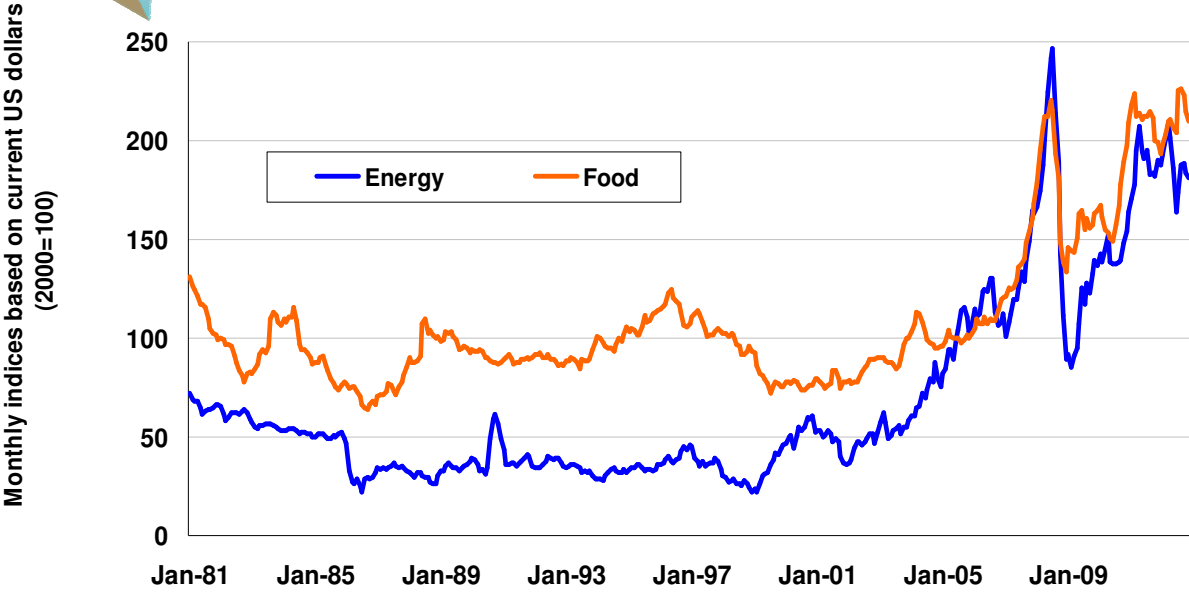


### Average relative costs from systemic banking crises in Asia Pacific (1970-2011)



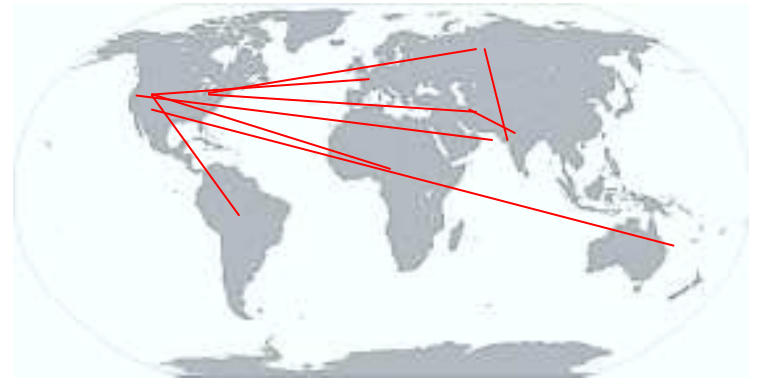


# High, volatile, and highly-correlated commodity prices





# Asia-Pacific faces multiple, overlapping/ sequential, and increasingly large shocks—“new normal” for the region



A Bangladeshi girl from a lower income group buys rice from a shop, selling goods at a subsidised price in Dhaka, Bangladesh. Photograph: Abir Abdullah/IFPA



A woman digs out potatoes Tuesday in her former garden, ravaged by wildfires that also burned her house, in Verkhnyaya Vereya village, Russia. Source: European Presphoto Agency



Traders frantically signal trades at the Chicago Mercantile Exchange. 1999 file photo. REUTERS/Scott Olson



A man with his child while escaping floods in Risalpur, Pakistan. <http://newredindian.wordpress.com/2010/08/25/social-inequality-worsens-the-impact-of-the-floods-in-pakistan/>



A rescue worker carries an elderly resident across a surging river in New Bataan, Philippines, two days after Typhoon Bopha hit the province. Photo: AFP



Lehman Brothers collapsed in September 2008. Some 6,000 of the bank's creditors are still waiting for payouts. Photograph: Linda Nylind for the Guardian



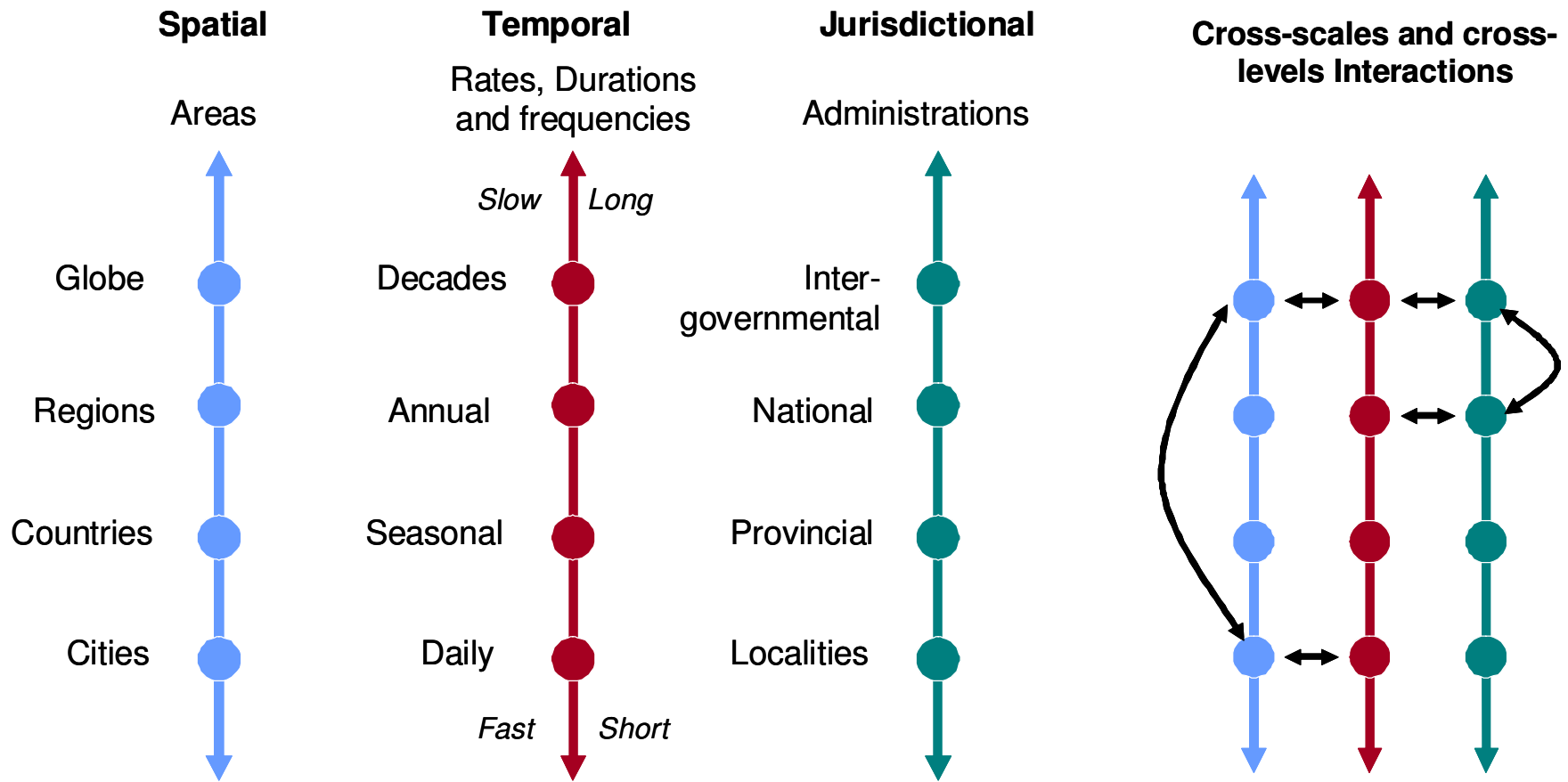
Aug. 29, 2012 photo, Unemployed educated Indian women stand in a queue to register themselves at the Employment Exchange Office in Allahabad, India. (AP Photo/Rajesh Kumar Singh)



Flickr. All rights reserved by getolympus.



# The region faces increasingly complex shocks



Source: ESCAP based on Cash, David W., W. Neil Adger, Fikret Berkes, Po Garden, Louis Lebel, and Per Olsson (2006). Scale and Cross-Scale Dynamics: Governance and Information in a Multilevel World. Ecology and Society 11 (2): 8.



## Catastrophe waiting to happen: Land, water, energy nexus

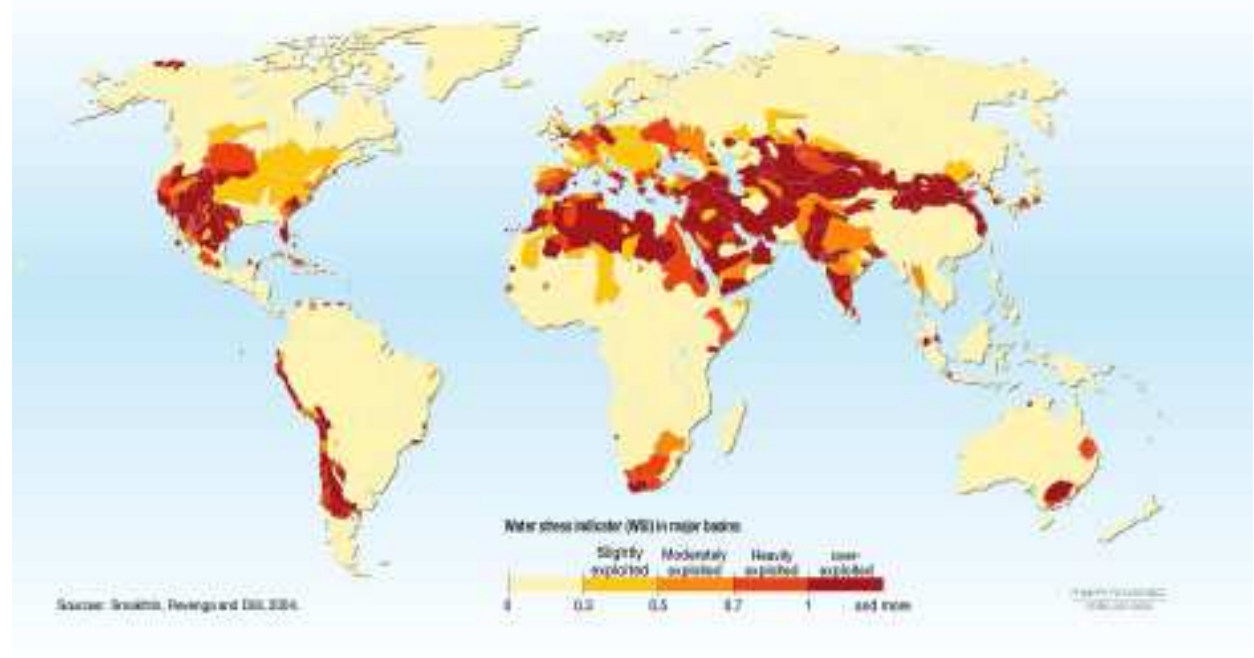
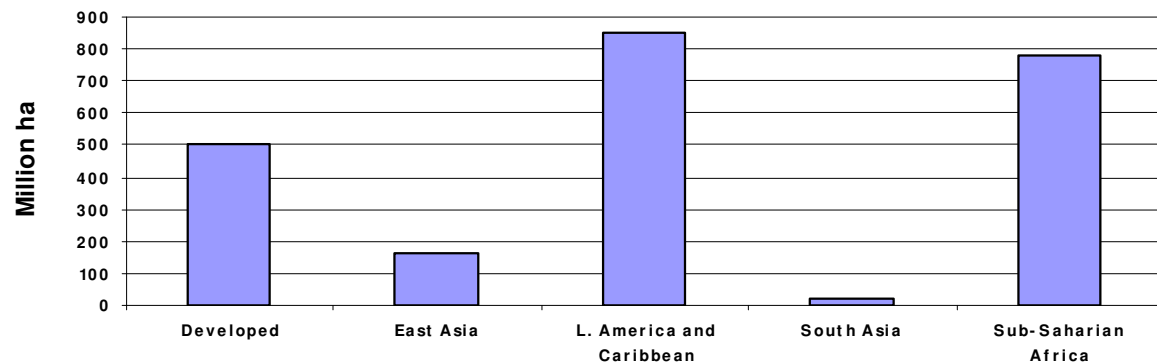
-Running out of arable land

-Highly water stressed

-Easy access to energy reserves are running out

-Challenges compounded by climate change

Arable land potential 2009





## Who is affected by economic crises and disasters?

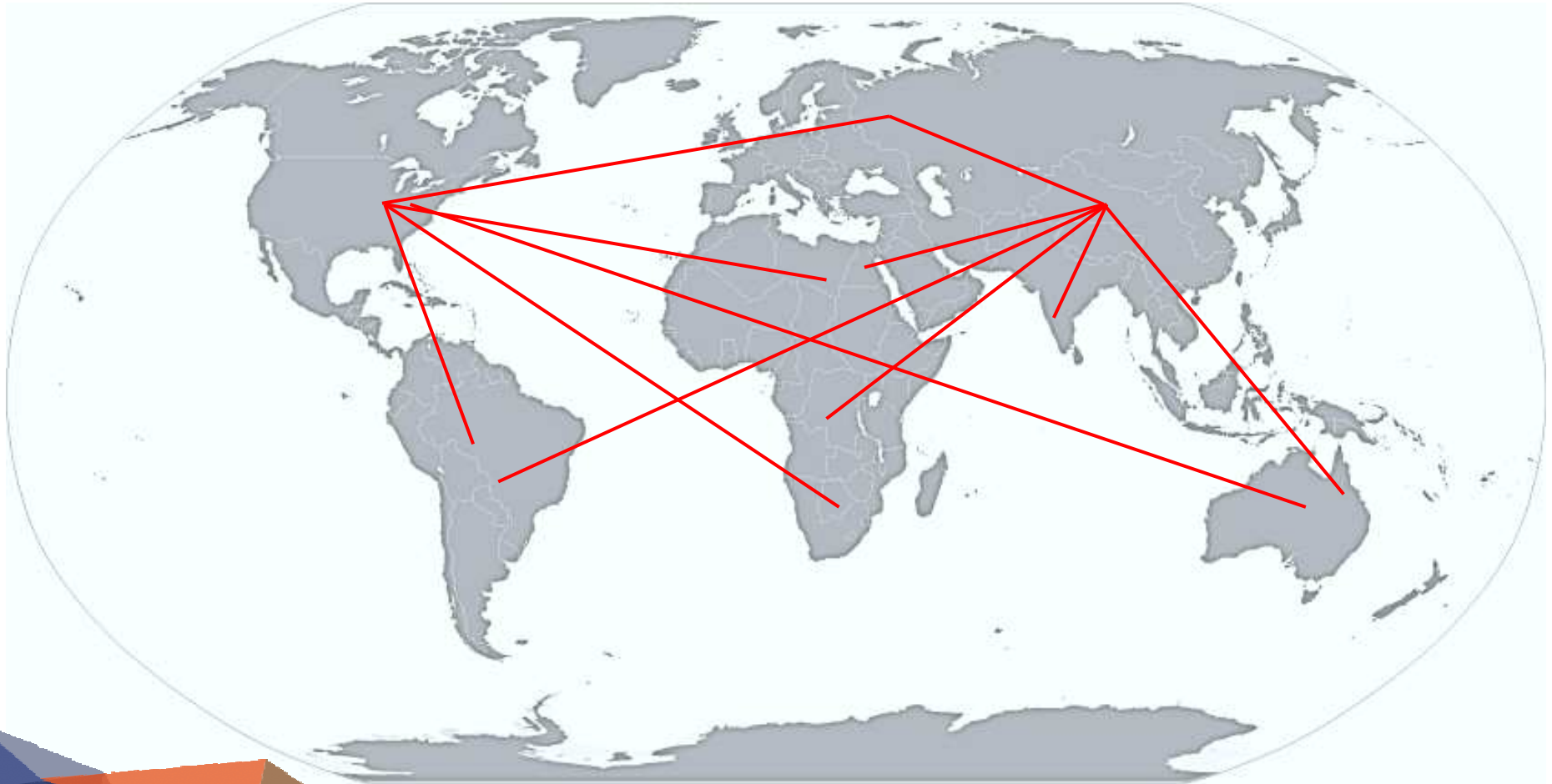
- Poor and the most vulnerable groups
- They often experience multiple, repeated shocks from various sources—all forms of economic crisis, natural hazards, climate change impacts
- Each shock erodes the capacity to cope with the next shock
- Coping strategies may look resilient but could be detrimental to long term resilience

Evidence of resilience	Evidence of vulnerability
Living off savings	Cutting back basic consumption; fewer and less nutritious meals
Internal migration for opportunities	Cutting back essential nonfood consumption including soap and shampoo
Adapting business strategies	Forgoing health care; switching to traditional healers
Cutting back nonessential spending; delaying large purchases	Sale of assets needed for livelihood
Extending working hours	Accumulation of unserviceable debts
Working more jobs	School dropouts; child labor; switching from private to public schools
Striving to keep kids in school	High-risk income-generating activities
Returning to education or training	Depletion or breakdown of community support mechanisms
Communal meals	Theft; crime; drug selling
Mutual support groups; support from family and friends	Divorce and abandonment
Saving-credit groups	Increased alcohol and drug use
	Lower resilience to other shocks



# The New Normal

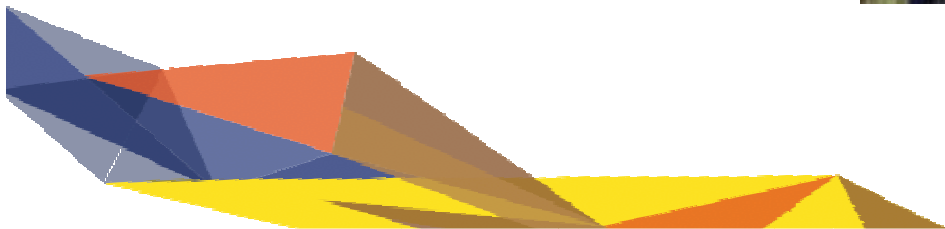
The world faces multiple, simultaneous, sequential and increasingly large shocks.





## Poor and Vulnerable are Hardest Hit

***“Why should something that happens ten thousand miles away affect me?”***  
*- Female worker in Karnataka, India, who lost her job in 2009*





# Building Resilience

*Regional Cooperation*

*Critical  
Infrastructure*

*Economics of  
Resilience*

*“The capacity of countries and their people to withstand, adapt to, and recover from natural disasters and major economic crises – so that their people can continue to lead the kind of lives they value.”*

*Supply  
Chains*

*Financial Cooperation*

*Land, Water, Energy*

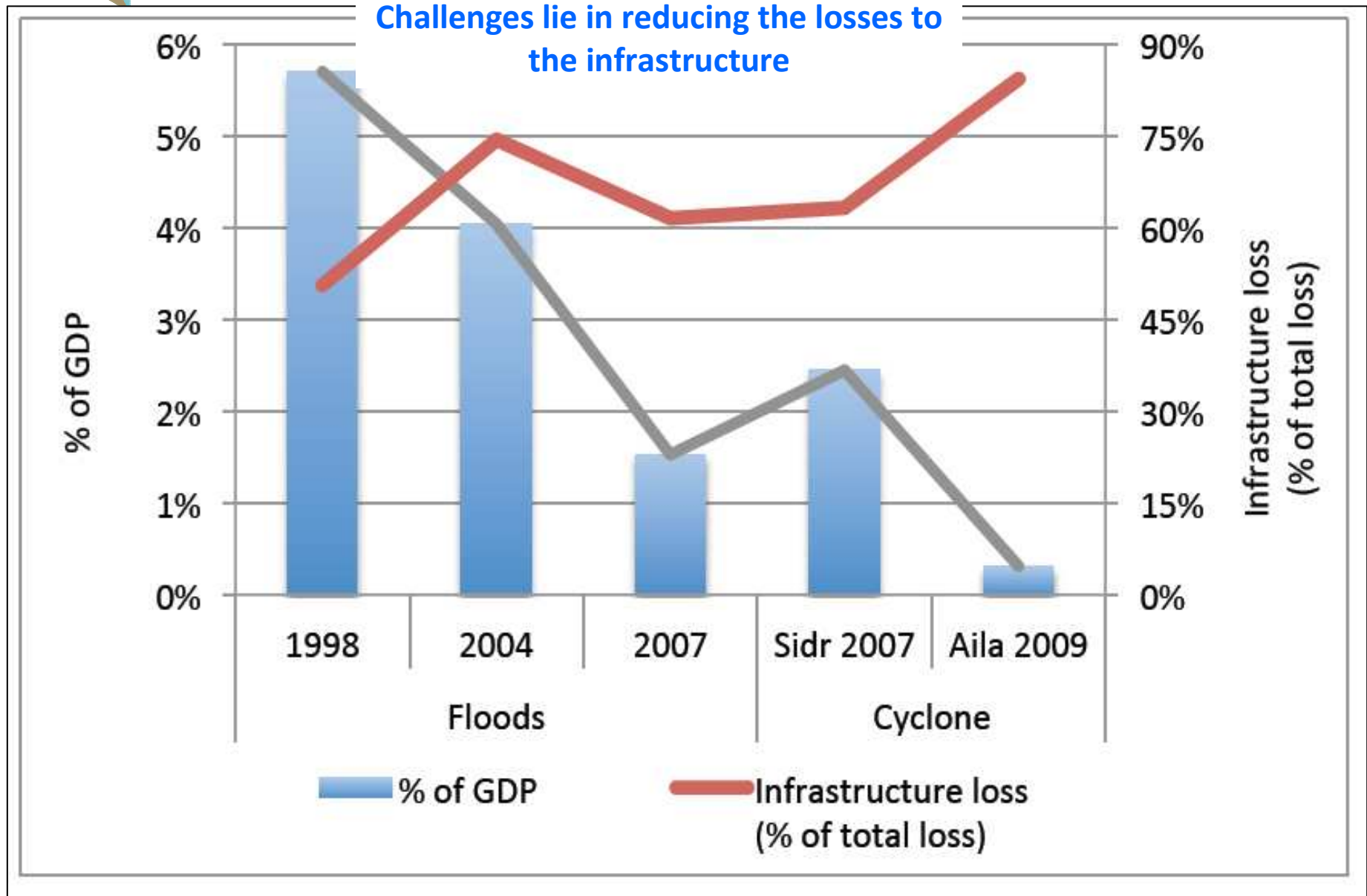
*Community Resilience*







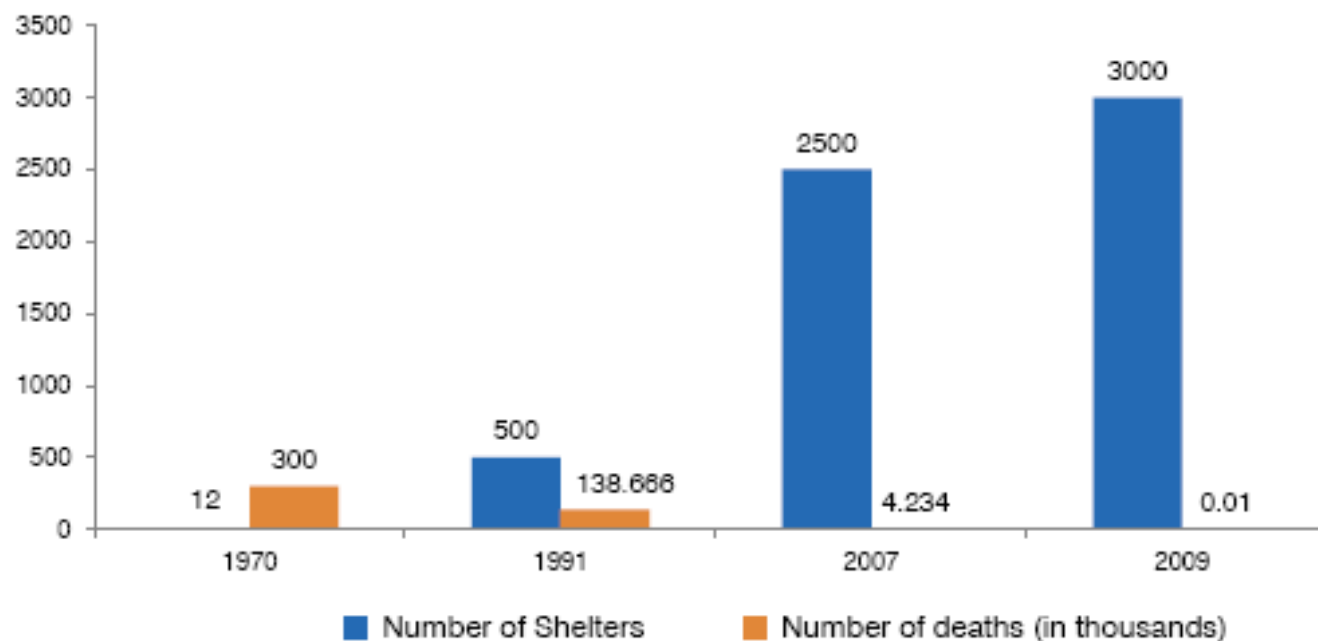
# Resilience Story of Bangladesh





# Resilience Story of Bangladesh

## Bangladesh – cyclone shelters save lives, 1970–2010



Source: World Bank 2012b.



# Resilience Story of Bangladesh

**Investing in DRR reduces economic vulnerability,...**

US\$ 4.3 Billion  
in losses

1998 Cyclone

US\$ 2.4 Billion  
in losses

2007 Cyclone

US\$ 0.27  
Billion  
in losses

2009 Cyclone

*Investments to raise agricultural productivity in low lying areas, flood protection & drainage in urban areas, irrigation schemes to enable dry season crop, coastal 'greenbelt' projects.*

**Bangladesh's DRR investments over 35 years**



Thank you

