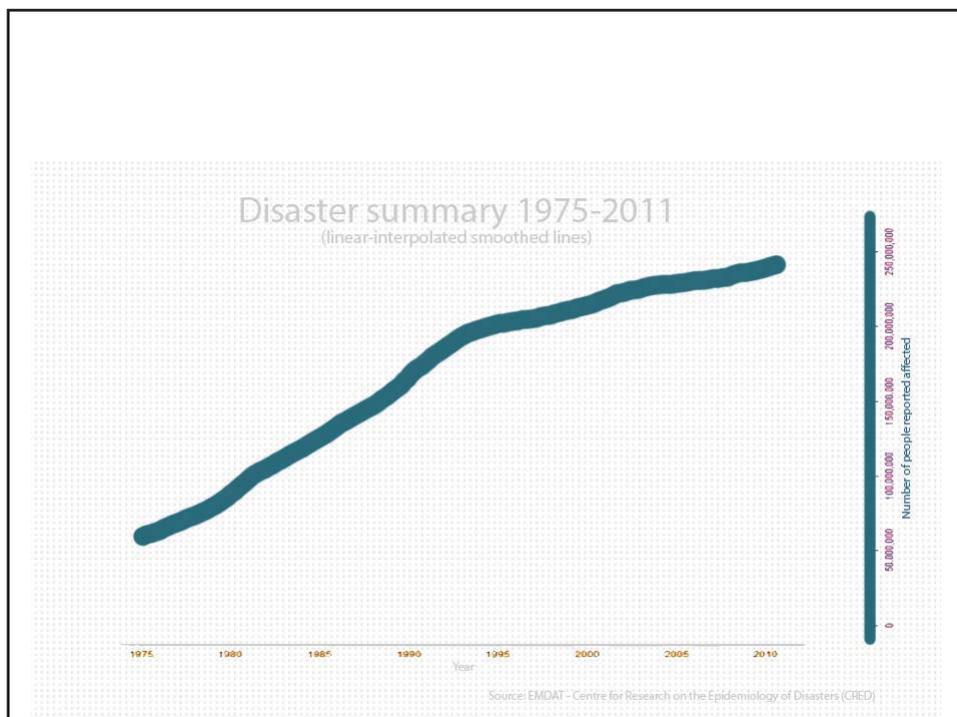


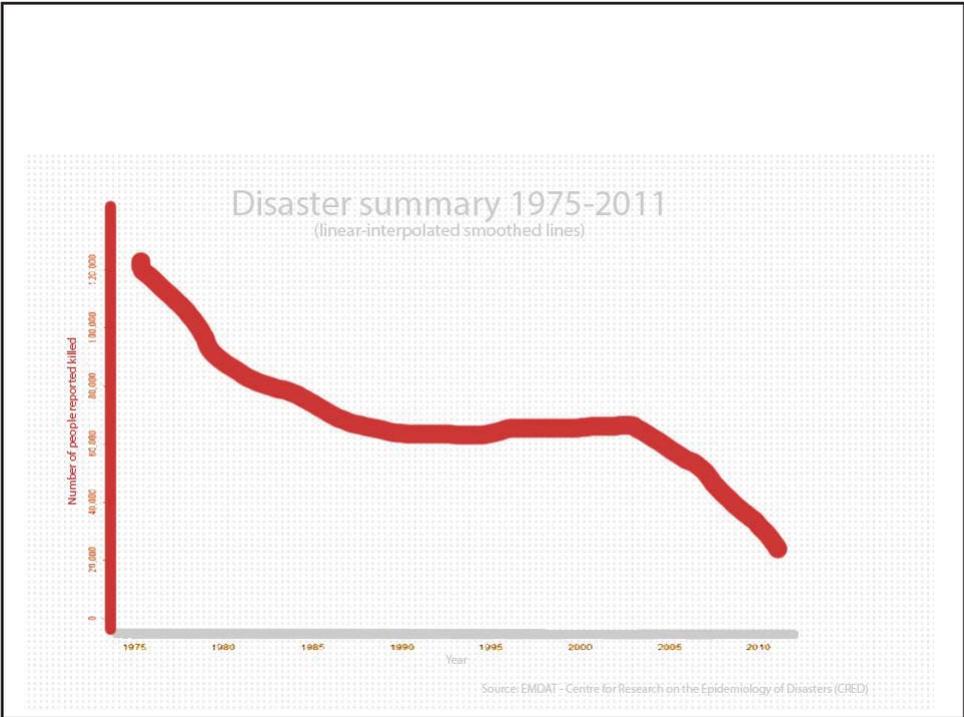
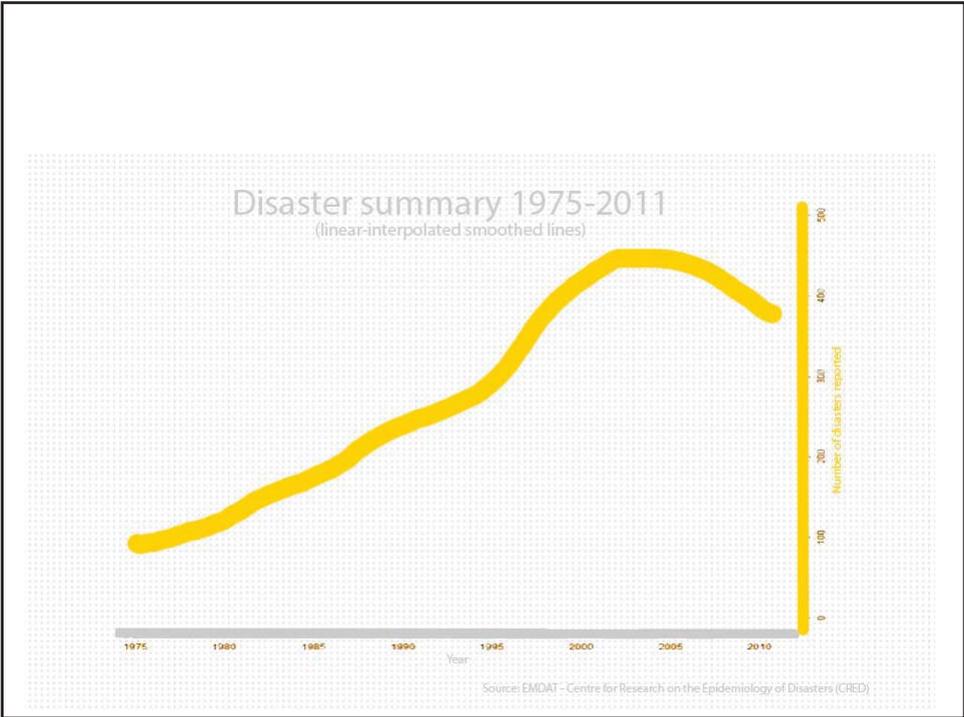
Effects of Disaster Risk Management on economic damage: Costs of badly managed disasters versus savings by prevention and preparedness.

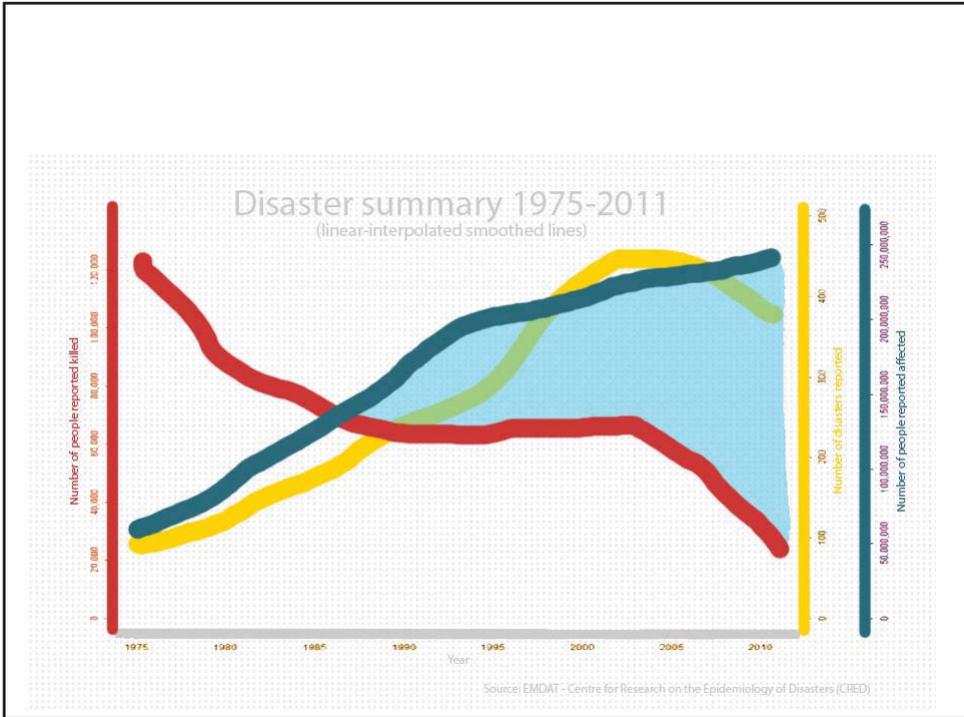
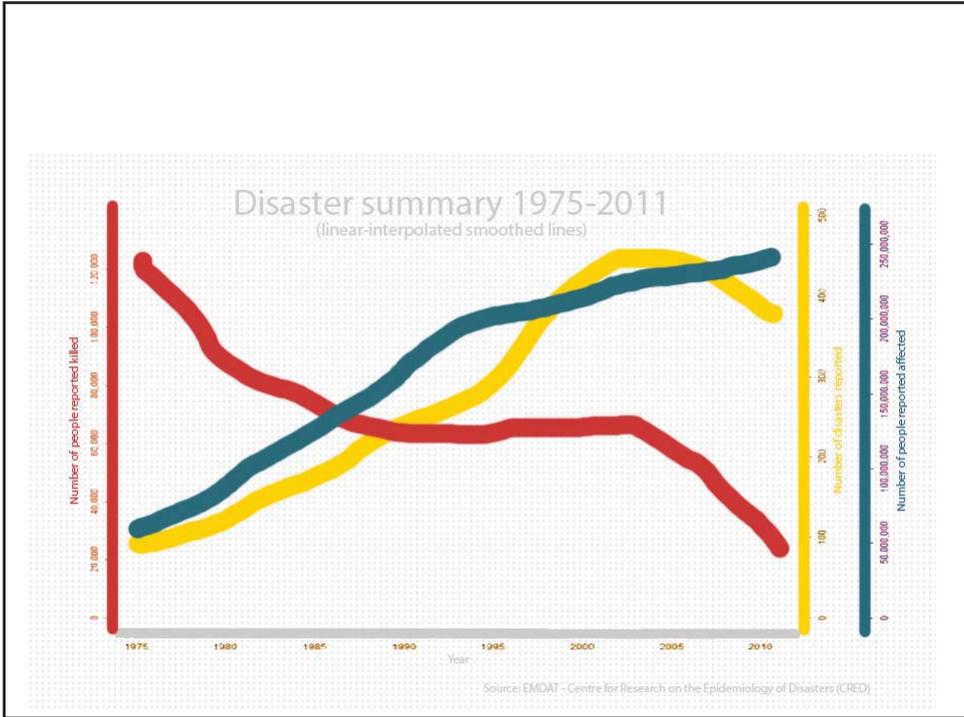


Disaster Risk Management
Europe and Central Asia
The World Bank Group

Joaquin Toro
Regional DRM Coordinator

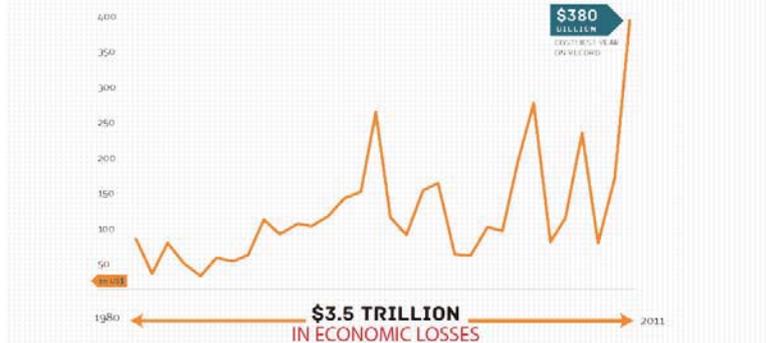




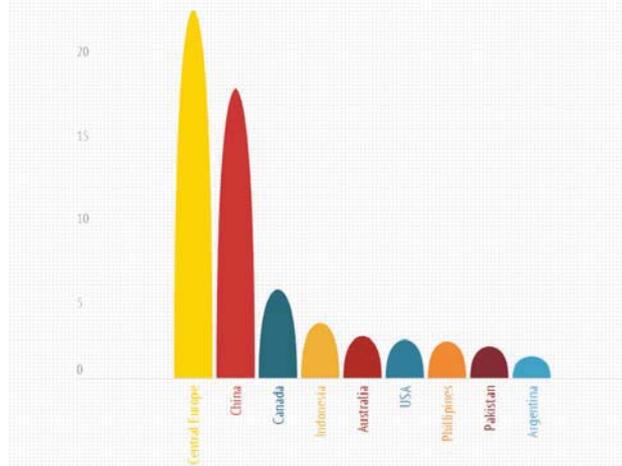


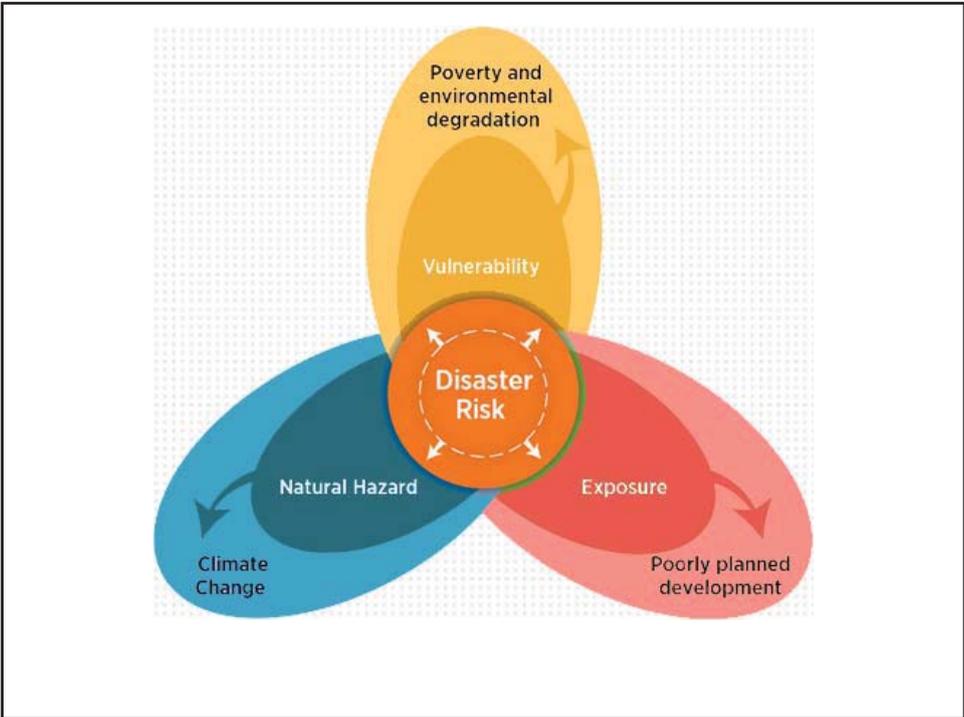
DISASTERS affect everyone

but they impact the
poor and vulnerable
the most.

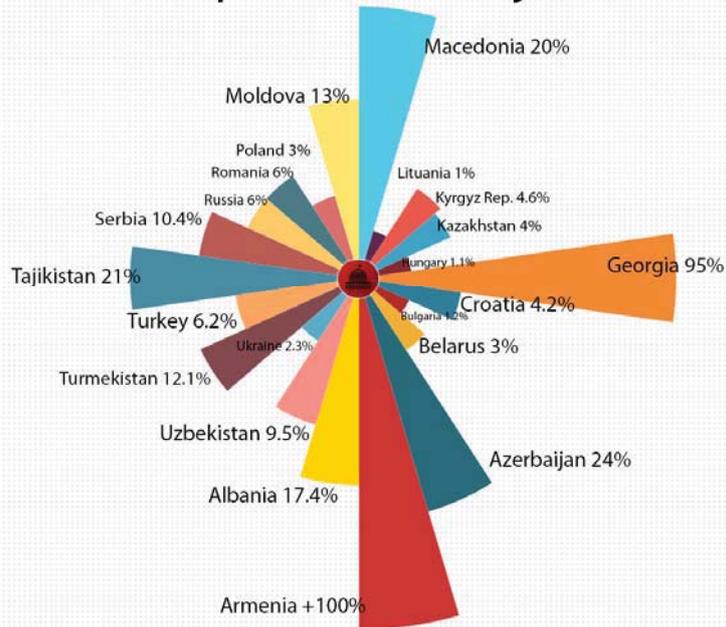


Economic Losses(US\$ bi) - Flooding 2013

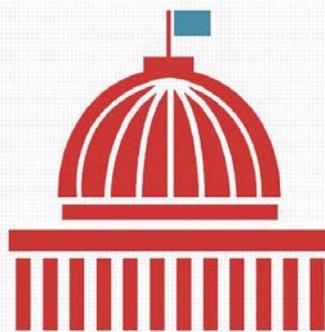




% GDP exposed to a major disaster



What does it mean to governments?



- Protect life of citizens
- Protect goods
- Contingent Liability



{ Large disasters raise budget deficit in developing countries between 0.23% and 1.1% }

large disasters have severe FISCAL effects

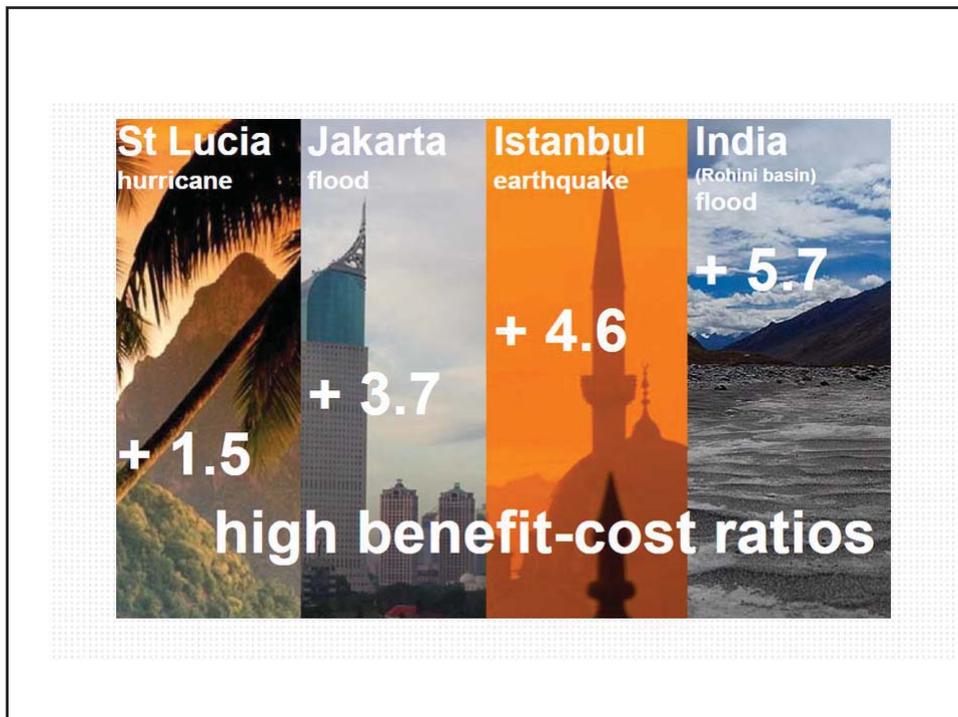
“ The **budget deficit** before the flood crisis was...**4.5%** of GDP, now [it can be]...as much as **6 to 7%**...”

- Pakistan Prime Minister Gilani

Sector	Building Back Better Factor
Housing	1.10-1.35
Schools	1.10-1.50
Hospitals	1.10-1.50
Agriculture/Livestock and Fisheries Infrastructure	1.10-1.40
Industrial Facilities	1.10-1.40
Commerce and Trade	1.10-1.35
Water and Sanitation	>1.00*
Transport	>1.00*
Electricity	>1.00*
Communications	>1.00*

*Costs of building back better = Replacement Costs x Building Back Better Factor
 BBB Factor = Quality improvements + technological modernization + relocation costs + disaster risk reduction standards + multiannual inflation*

Source: GFDRR Damage and Loss Assessment Guidance Notes (2010)



Disaster Risk Reduction Activity	Extended Economics Benefits
Flood protection structures	Provision of irrigation or potable water and hydro-electric power
Improvements in civil society networks and linkages	Improved governance and more organised social structures
Proper planning processes	Delivery of basic necessities (e.g. potable water, drainage, sewerage, power, and community facilities)
Shelters	Community facilities (e.g. clinics or schools) in non-disaster periods
Improved water supply systems in rural areas	Water supply systems improved regardless of a disaster occurring
Construction and use of drainage pipes	Improved irrigation practices, possibly improved agricultural practices
Community-based disaster preparedness	Improved women's involvement in community level activities
Installing more resilient wireless communications	enhancing access to telephony and electronic data services
Training farmers to diversify the use of crops	Reducing vulnerability to poverty
Better monitoring of food supplies	Improving the food supply chain, possibly making it more cost-effective

