



# SAARC Regional Learning Workshop on MDRR & CCA into Development.

# South Asian priority of Action

- Eliminating poverty and creating human security
  - Conserving the natural resource endowments
    - Securing the economic base
  - Strengthening institutional systems

# Framework of South Asian Action

- The challenges and priorities of sustainable development clearly extend beyond national boundaries.
- Needs to focus on enhancing regional cooperation in specific areas of high potential, supported by strengthened implementation systems

# Strengthened Implementation Systems

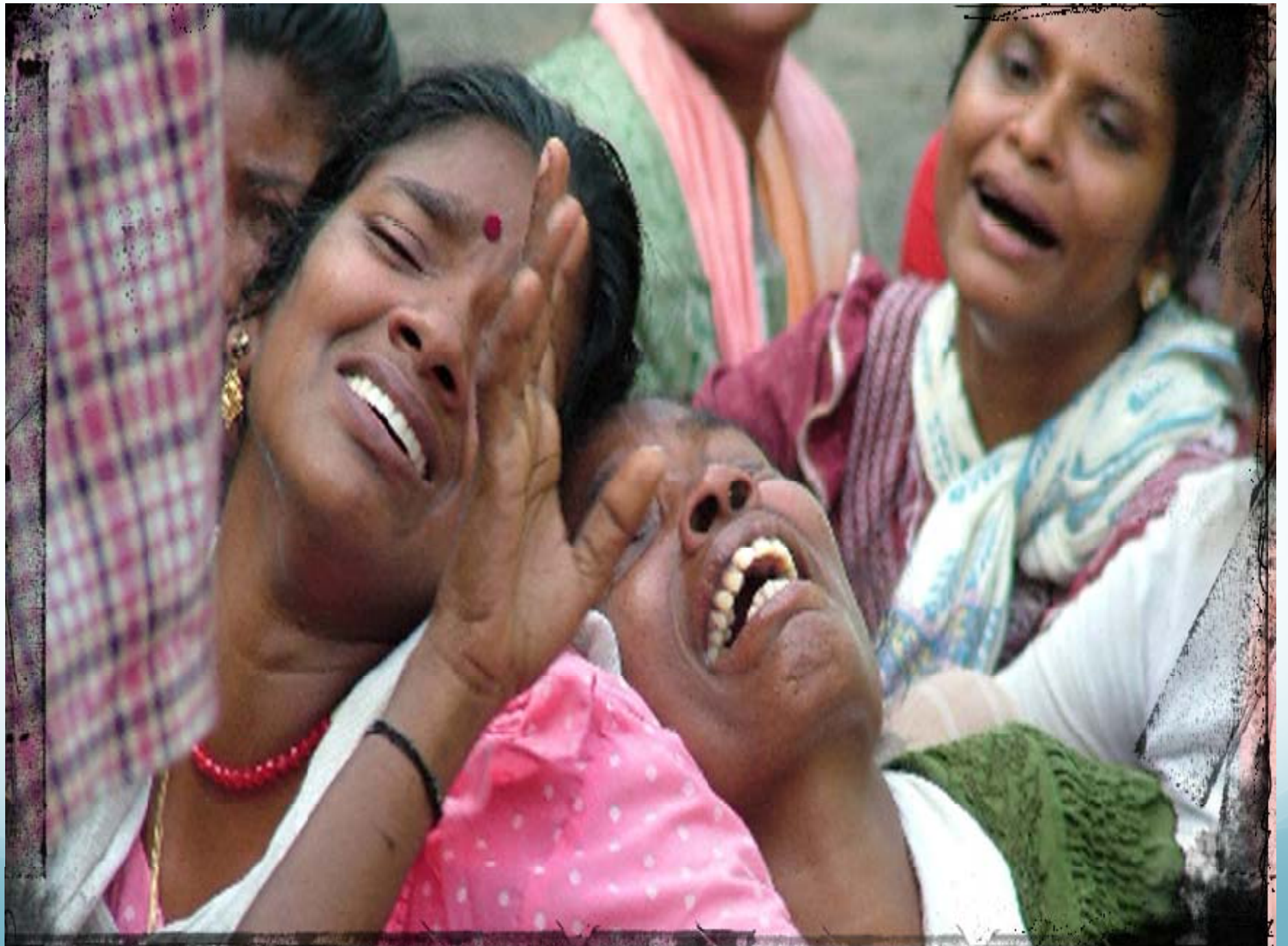
Some of the key implementation systems that will require attention to address South Asian cooperation for sustainable development are:

- Sustainable Development Planning and Programming
- Institutional Mechanisms
- Resource Mobilisation Arrangements
- Monitoring and Evaluation Systems











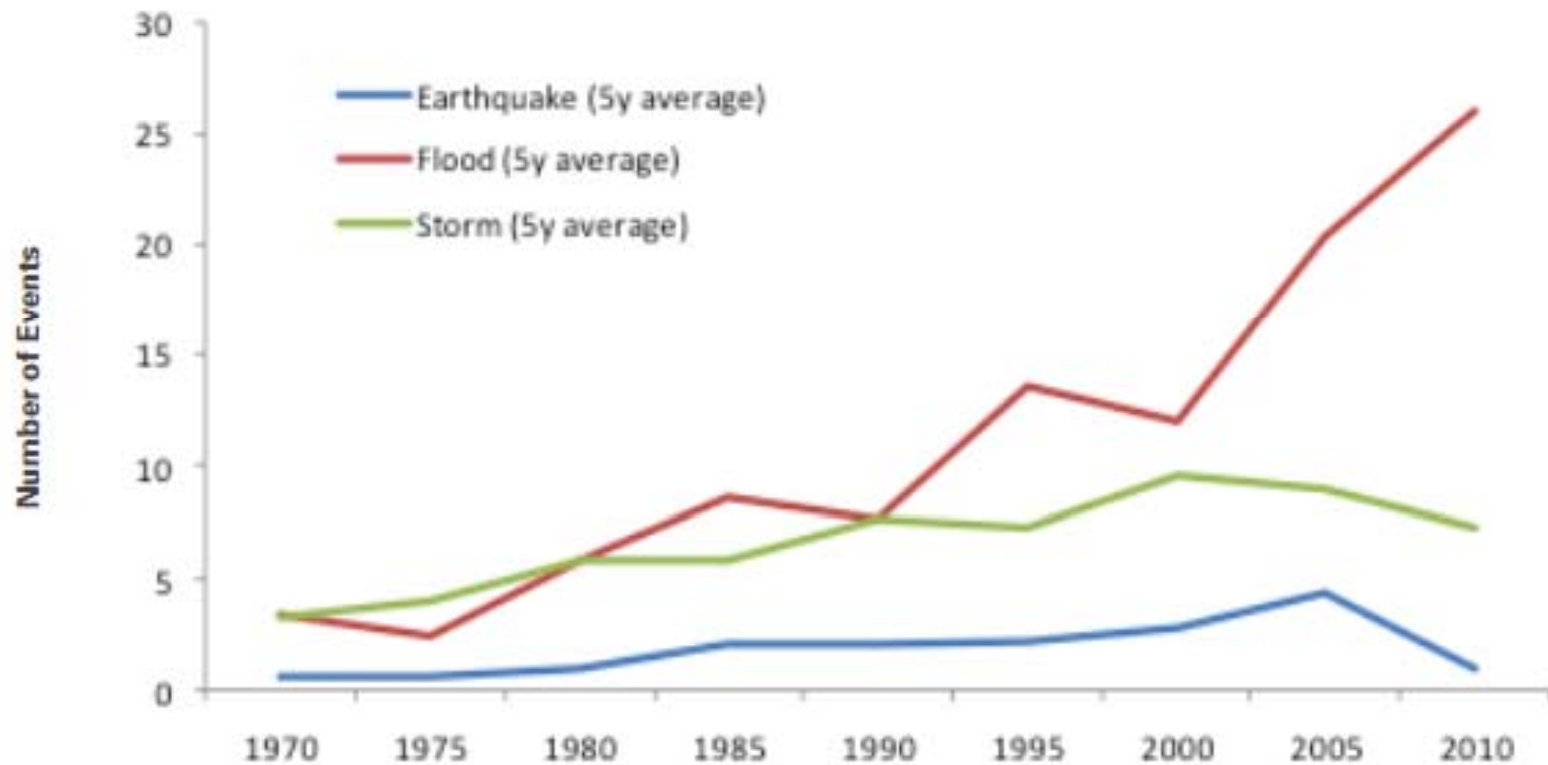
# Potential Risks From Different Hazards

**Table 2: Potential Risks From Different Hazards**

	Sea Level Rise	Glacier Retreat & GLOFs	Increase in Intensity of Flood	Increase in Intensity of Drought	Temperature Rise	Cyclone
Afghanistan	No	Yes	-	Yes	Yes	No
Bangladesh	Yes	Yes	Yes	In some Parts	Yes	Yes
Bhutan	No	Yes	Yes	No	Yes	No
India	Yes	Yes	Yes	Yes	Yes	Yes
Maldives	Yes	No	Yes	No	Yes	No
Nepal	No	Yes	Yes	No	Yes	No
Pakistan	Yes	Yes	Yes	Yes	Yes	Yes
Sri Lanka	Yes	No	-	No	Yes	Yes
Source: IPCC AR4						



# Number of Disaster Events in South Asia (1970-2010)



Source: Emergency Events Database (EM-DAT: The OFDA/CRED International Disaster Database) (<http://www.em-dat.net>)





***During the 2010 flood in Pakistan, more than 1.6 million homes were destroyed or damaged and 2.2 million hectares of crops were destroyed, affecting almost 20 million people. UNDP provided early recovery support to almost 3,800 affected villages, helping five million people to rebuild their lives. CREDIT: UNDP PAKISTAN***

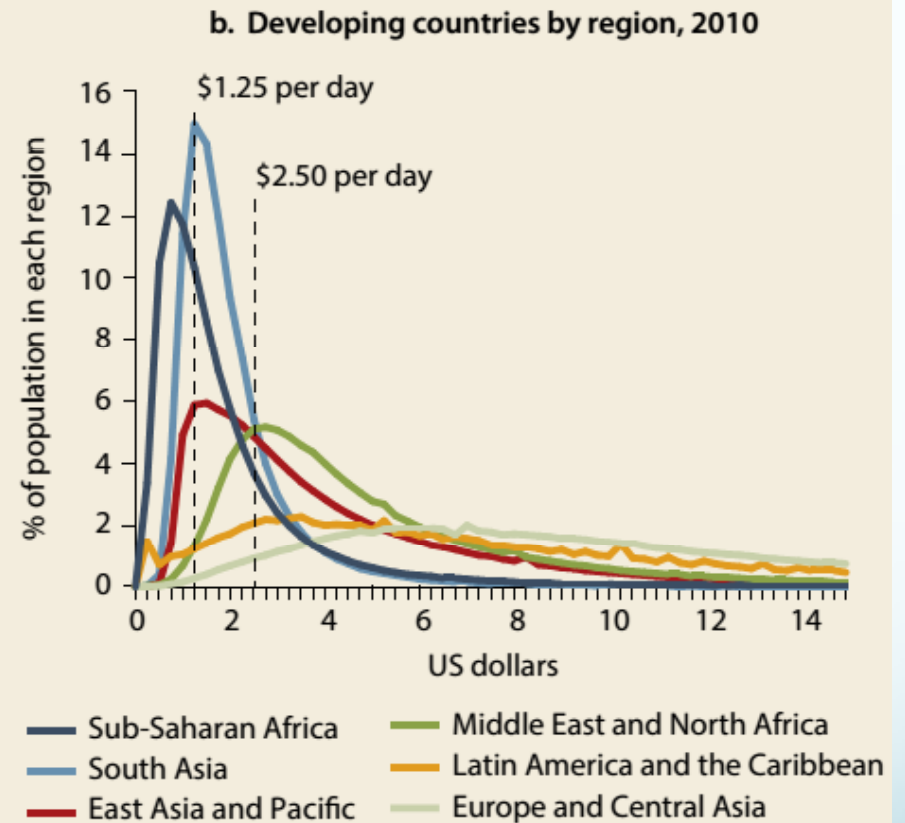
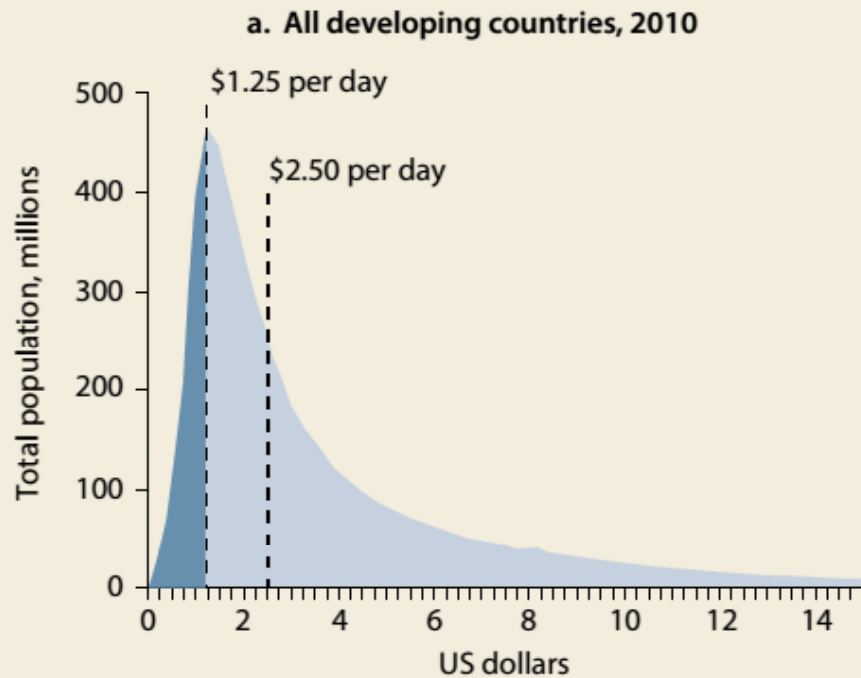


**Md Halim, lone survival in the family**

## Our Region

# The Reality Check

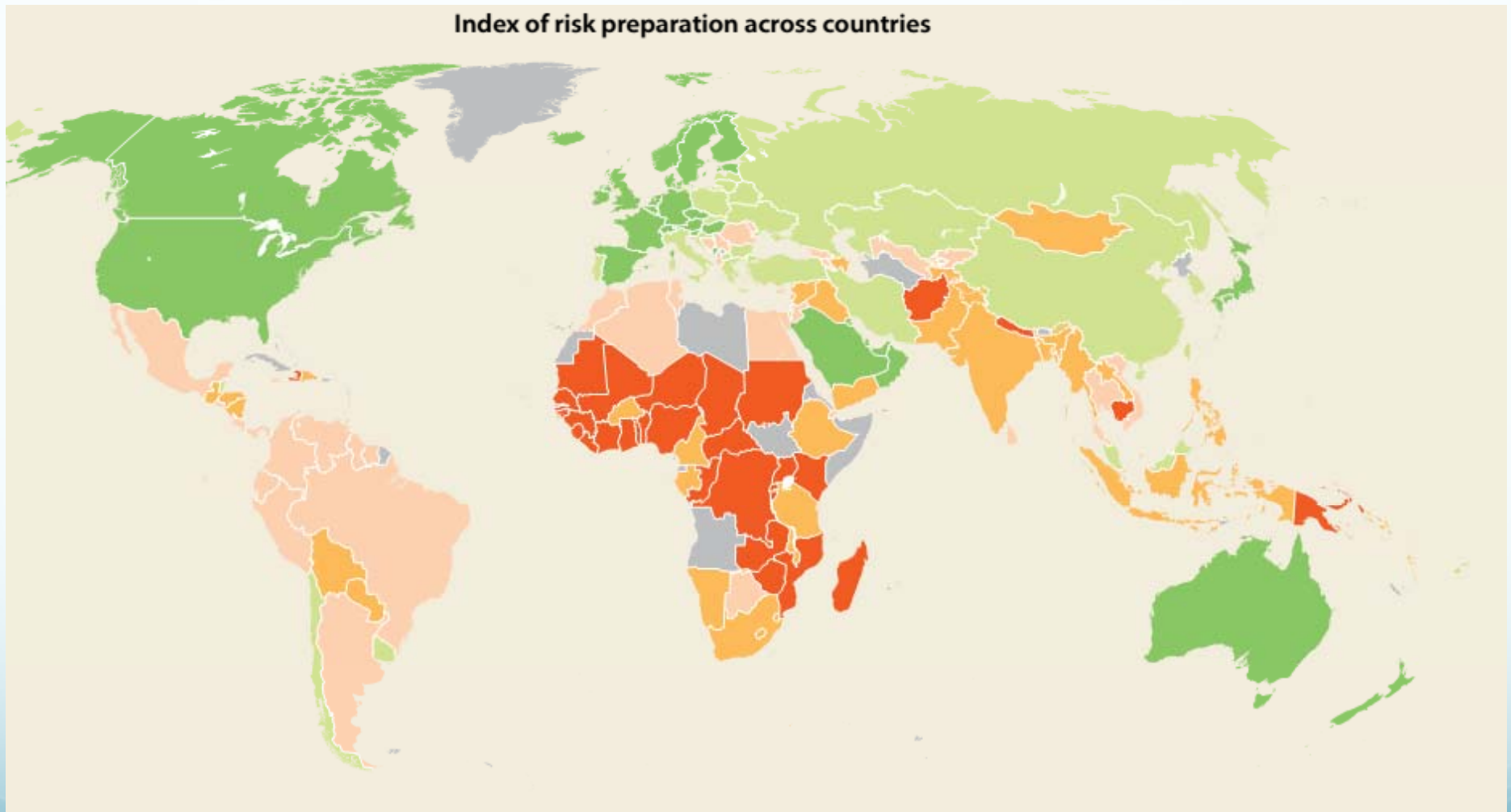
\$2.50, and nearly 75 percent on less than \$4.00.



Source: WDR 2014 team based on data from World Bank PovcalNet (database).

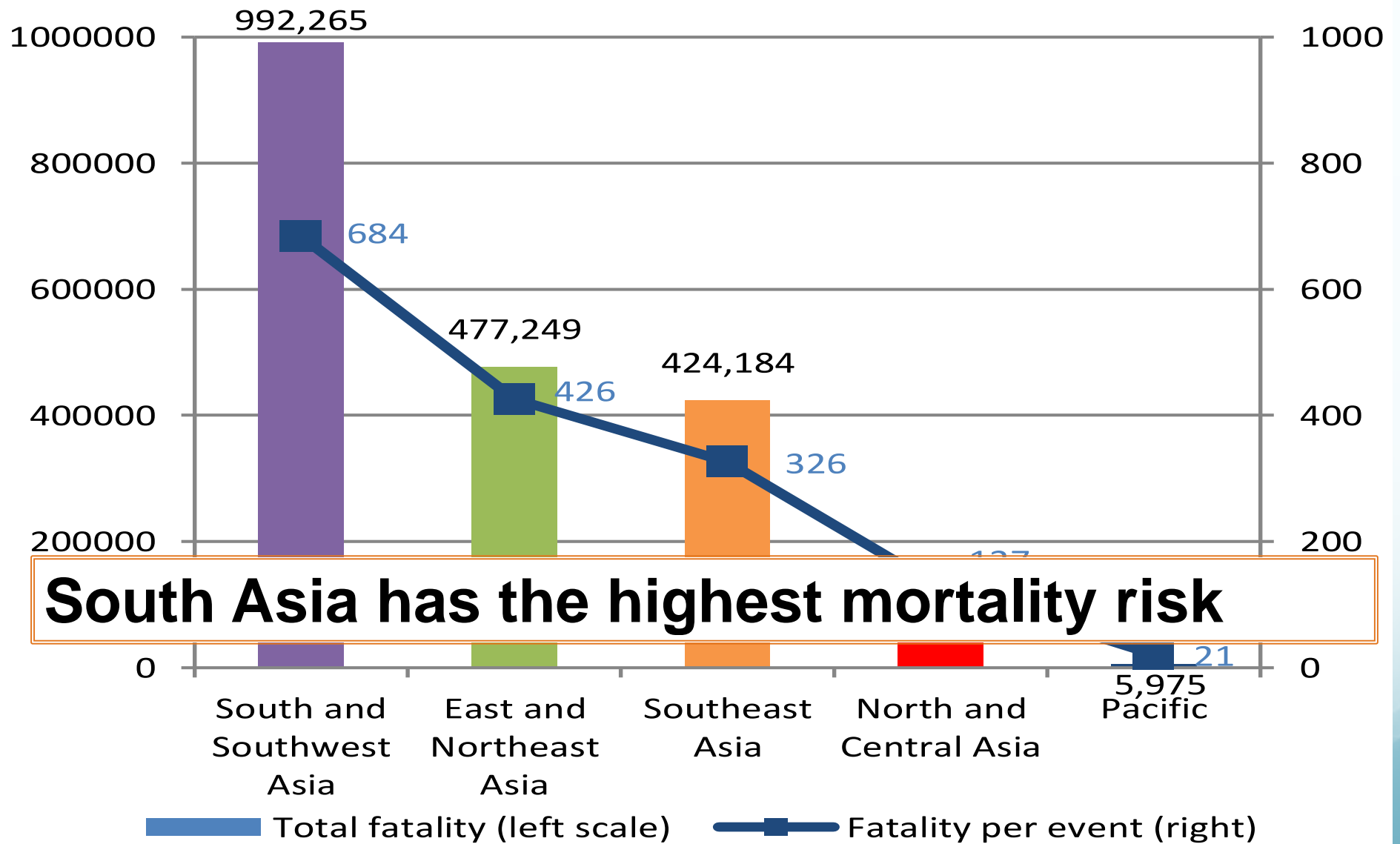
Note: \$1.25 per day is a widely used measure of extreme poverty. However, \$2.50 per day is considered a more relevant measure of extreme poverty for some

# Disaster Preparedness level



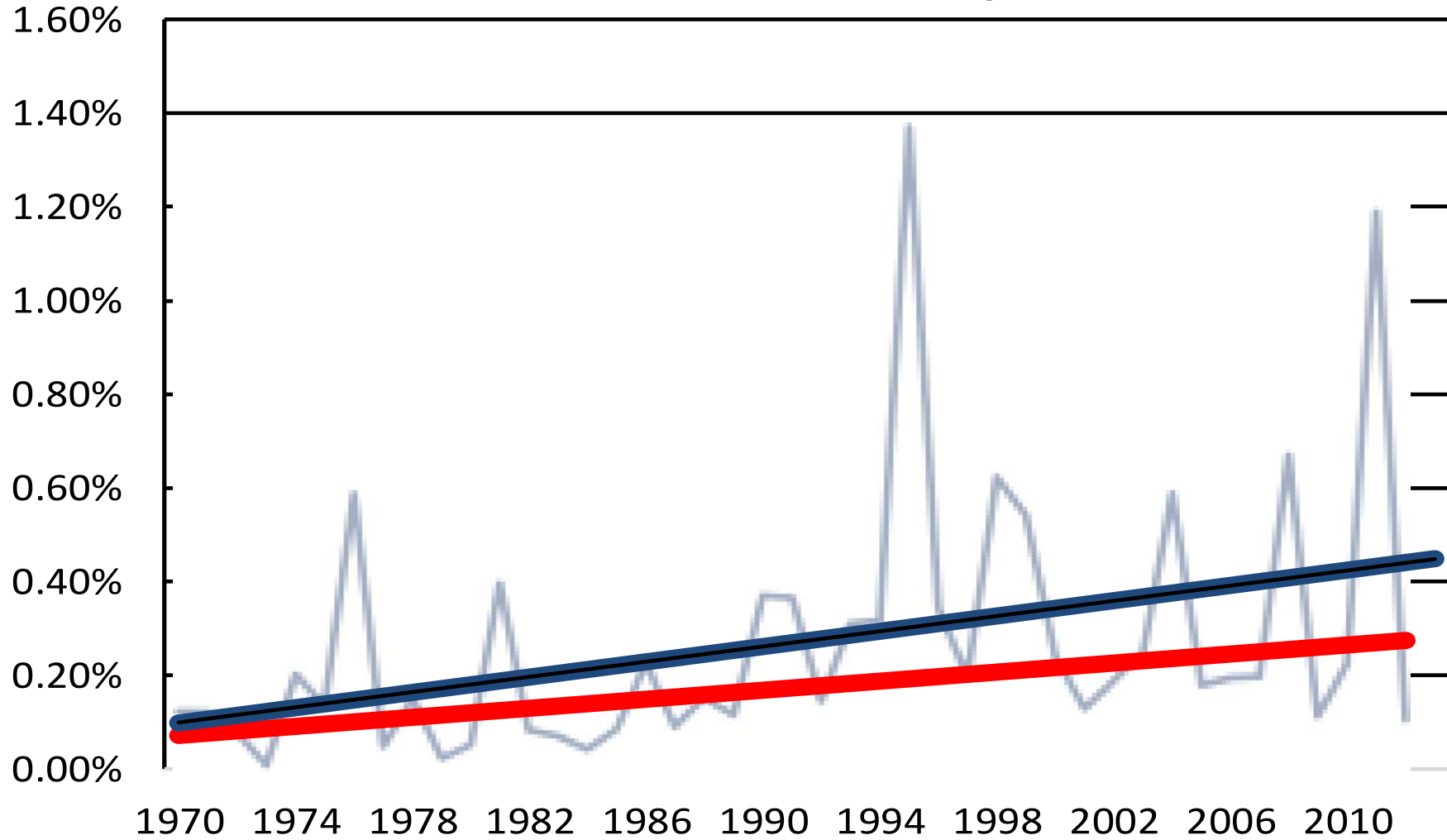


## Total Fatalities from Natural Hazards by Subregion (1970 – 2013)



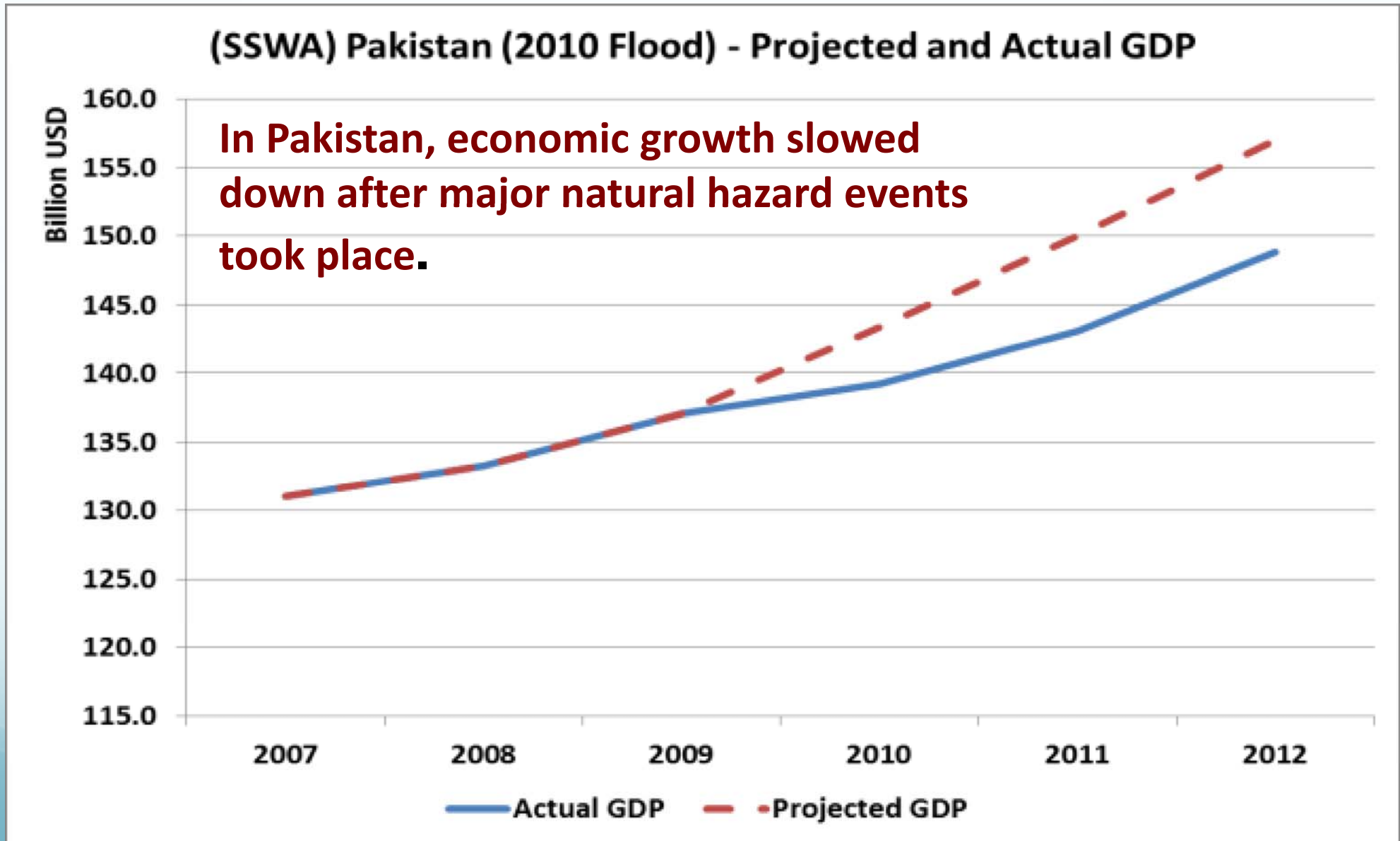
During 1970-2013 global economic losses from natural hazards as % of global GDP have grown substantially. Asia and the Pacific follows the trend, but with much higher levels.

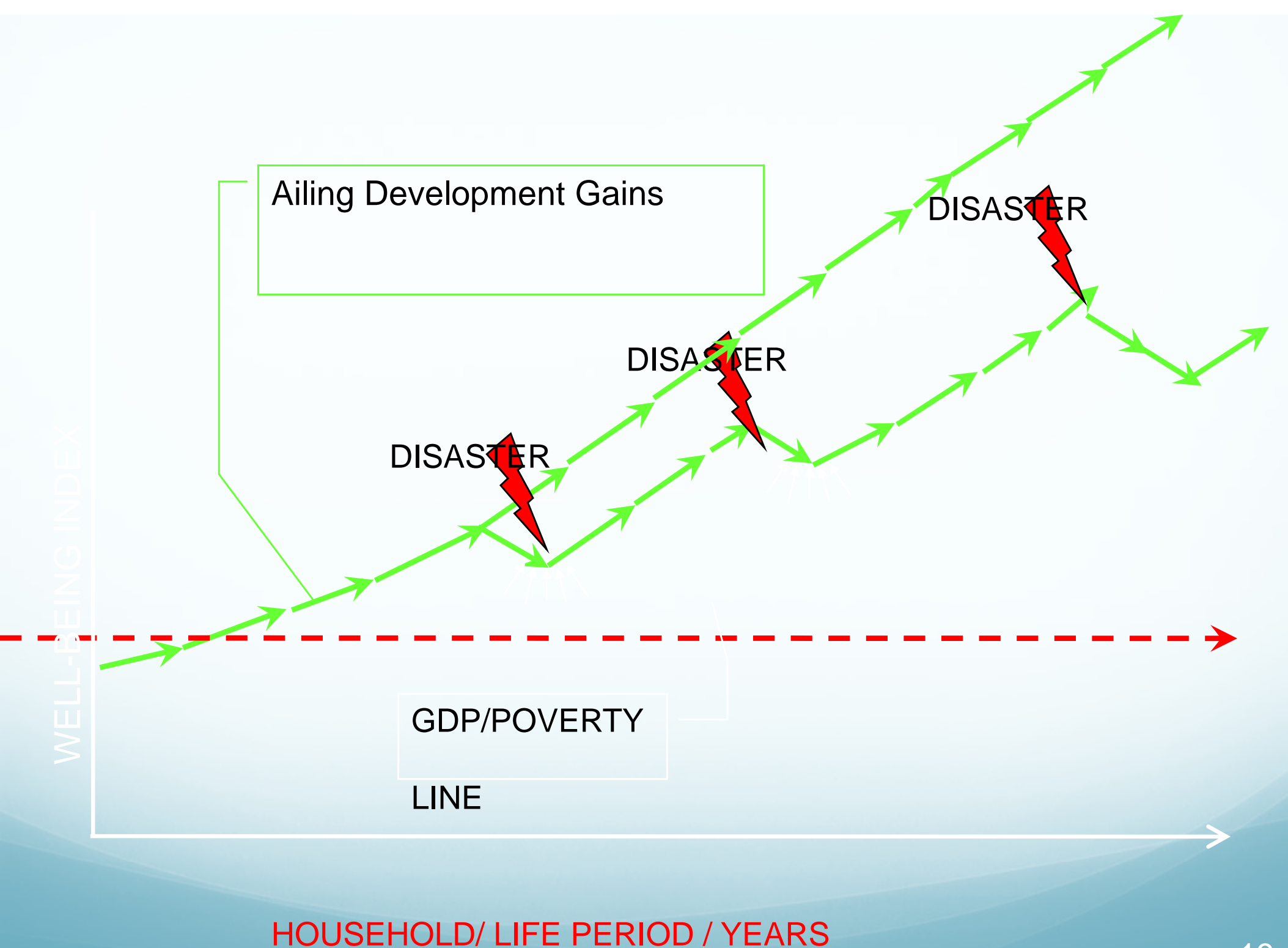
### *Economic Losses as % of GDP*



- Global Economic Damage / GDP
- Asia Pacific Economic Damage / GDP

# On national level, disasters generally have negative impact on economic growth



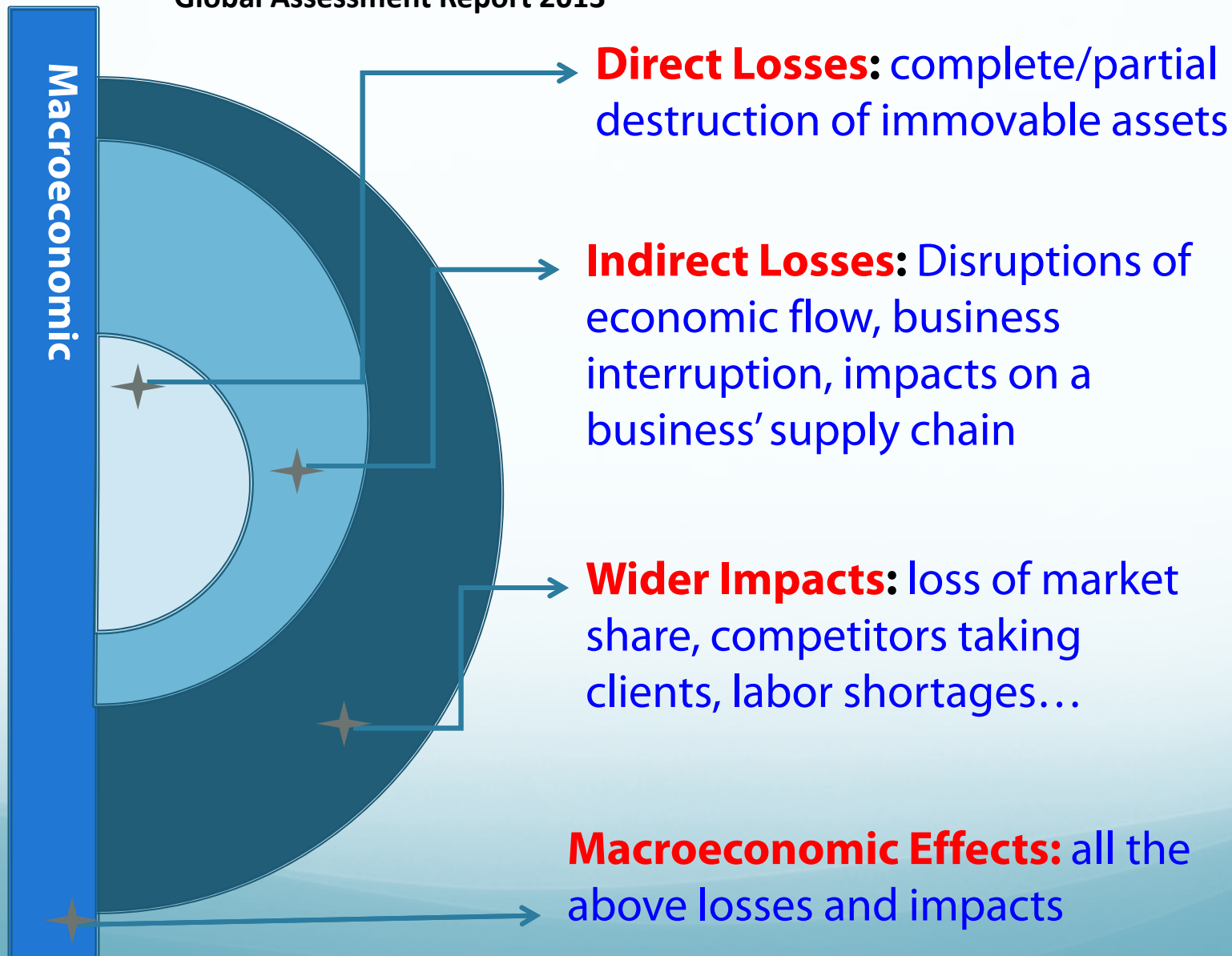




# Disaster impacts accounted only the stock and not the flow disruptions

Close to 50 percent of disaster impacts are not accounted for

— Global Assessment Report 2013

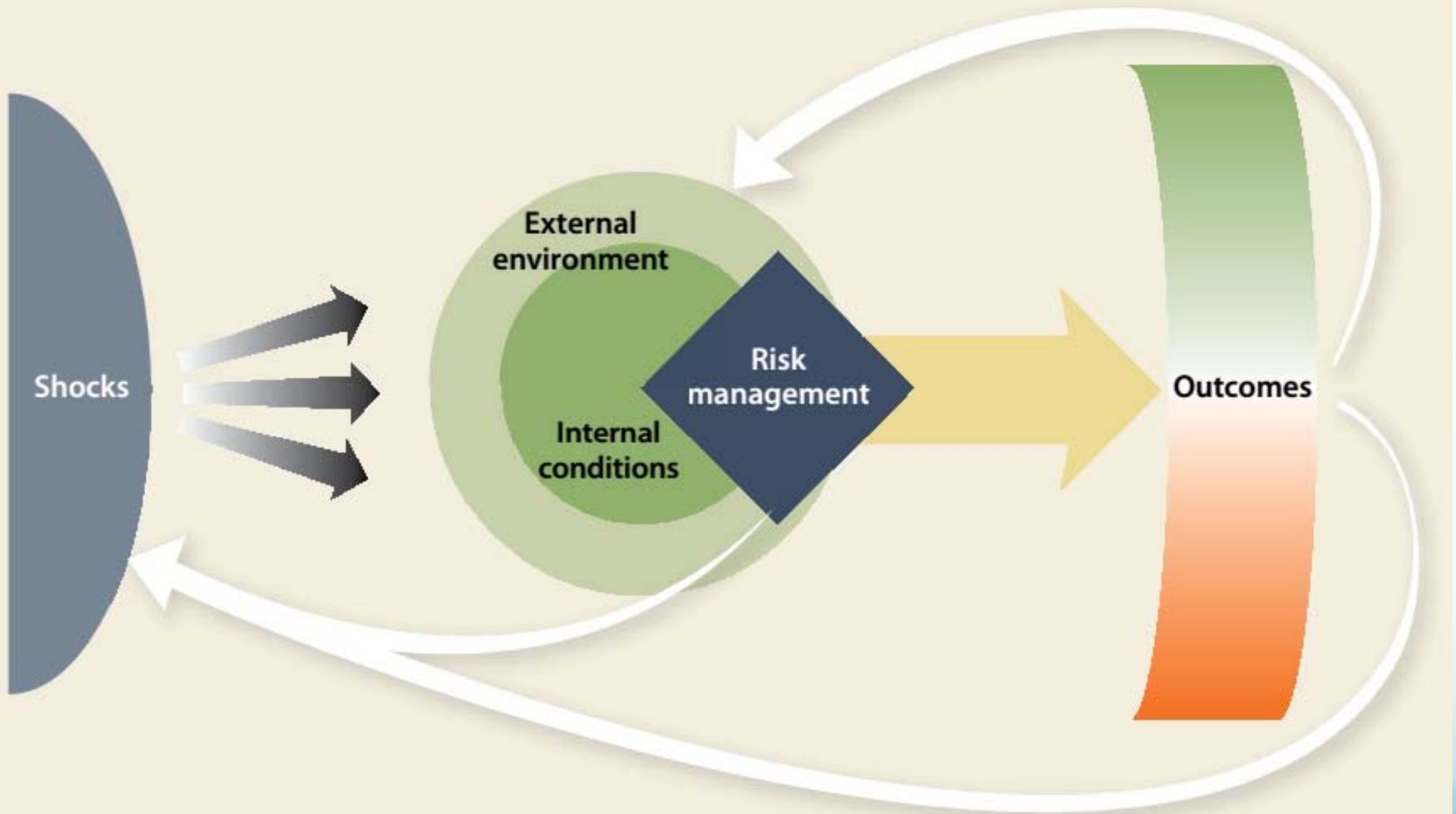


# Damage and Losses of Major Disasters in South Asia

Country / Year / Natural Hazard	Social Infrastructure	Physical Infrastructure	Economic Sectors	Cross-Cutting Issues	Total Damage and Loss	% of GDP
Odisha, India 2013 Cyclone	694.33	357.84	416.98	0.64	1,470	0.076%
Uttarakhand, India 2013 Flood	42.23	562.18	47.24	9.03	660.68	0.034%
Bhutan 2011 Earthquake	24	0	0	0	24	1.30%
Pakistan 2011 Flood	1,135	387	2,154	54	3,730	1.76%
Pakistan 2010 Flood	1,949	2,025	6,000	82	10,056	5.76%
Bangladesh 2007 Cyclone	925	222	490	6	1,643	2.12%
Sri Lanka 2005 Tsunami	427	127	250	10	814	3.34%

Million US\$ (Current)

# Shocks and Outcomes

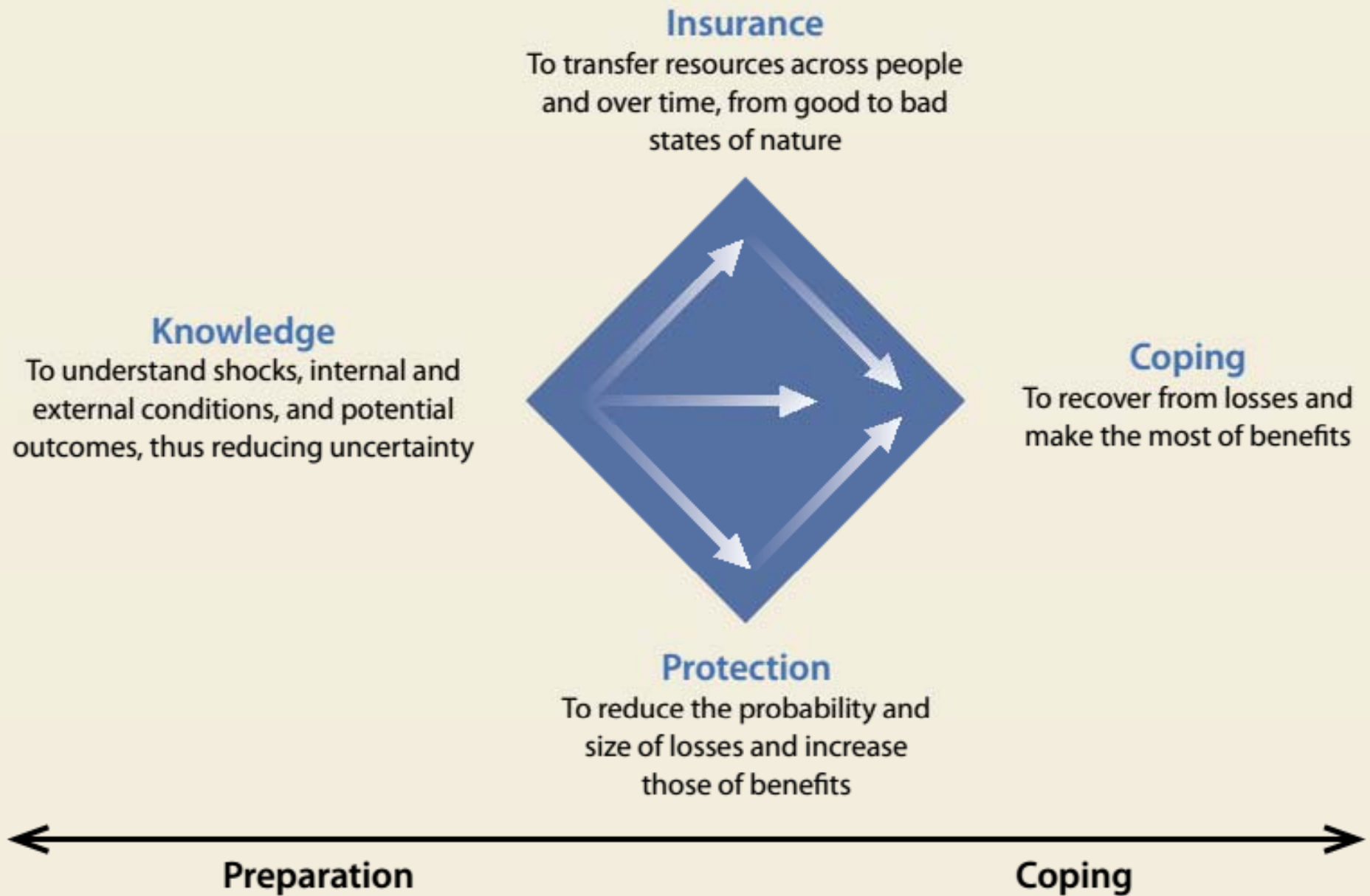


Source: WDR 2014 team.

Note: The feedback arrows in the risk chain diagram represent the potential for the outcomes of past shocks to affect exposure and internal conditions, as well as the propensity for future shocks. Similarly, the effectiveness of people's risk management can significantly affect the nature of and propensity for future shocks.



# Building Resilience



Source: WDR 2014 team.

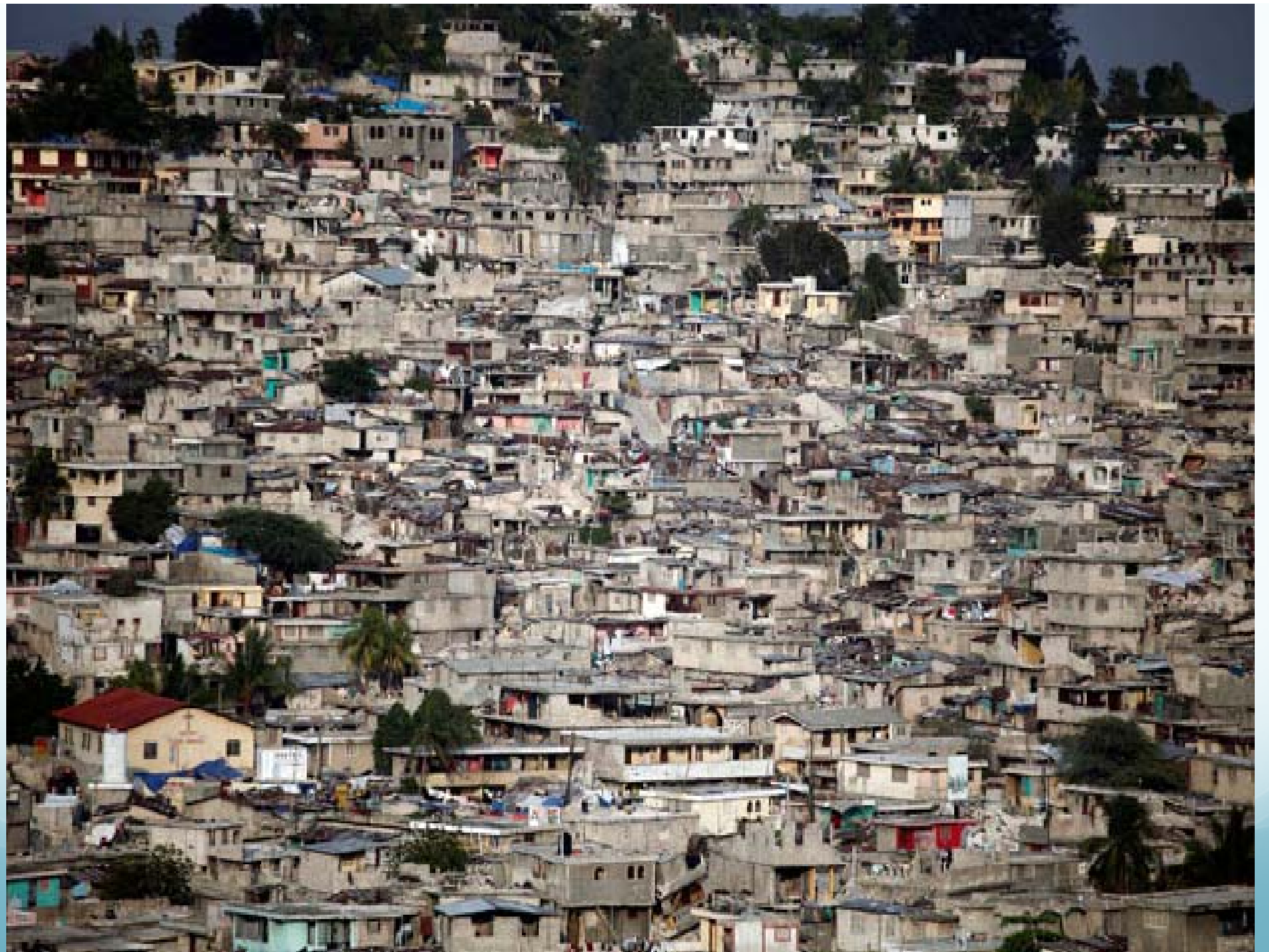
*Risk management for everyone:*

To pursue opportunity, people must confront risk



...not one risk, but many





the process requires creative innovation, not mere 'standard operating procedures'...





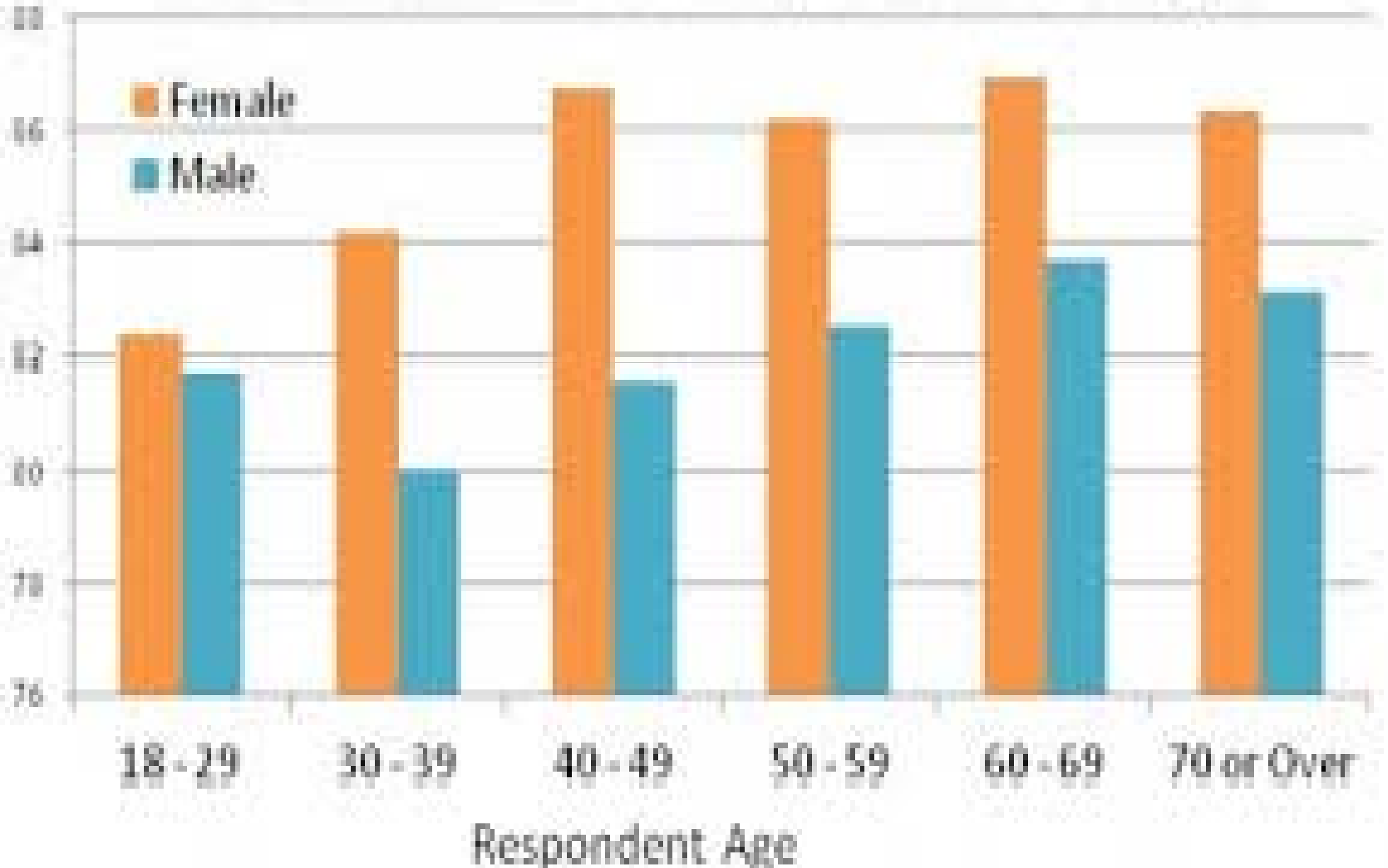




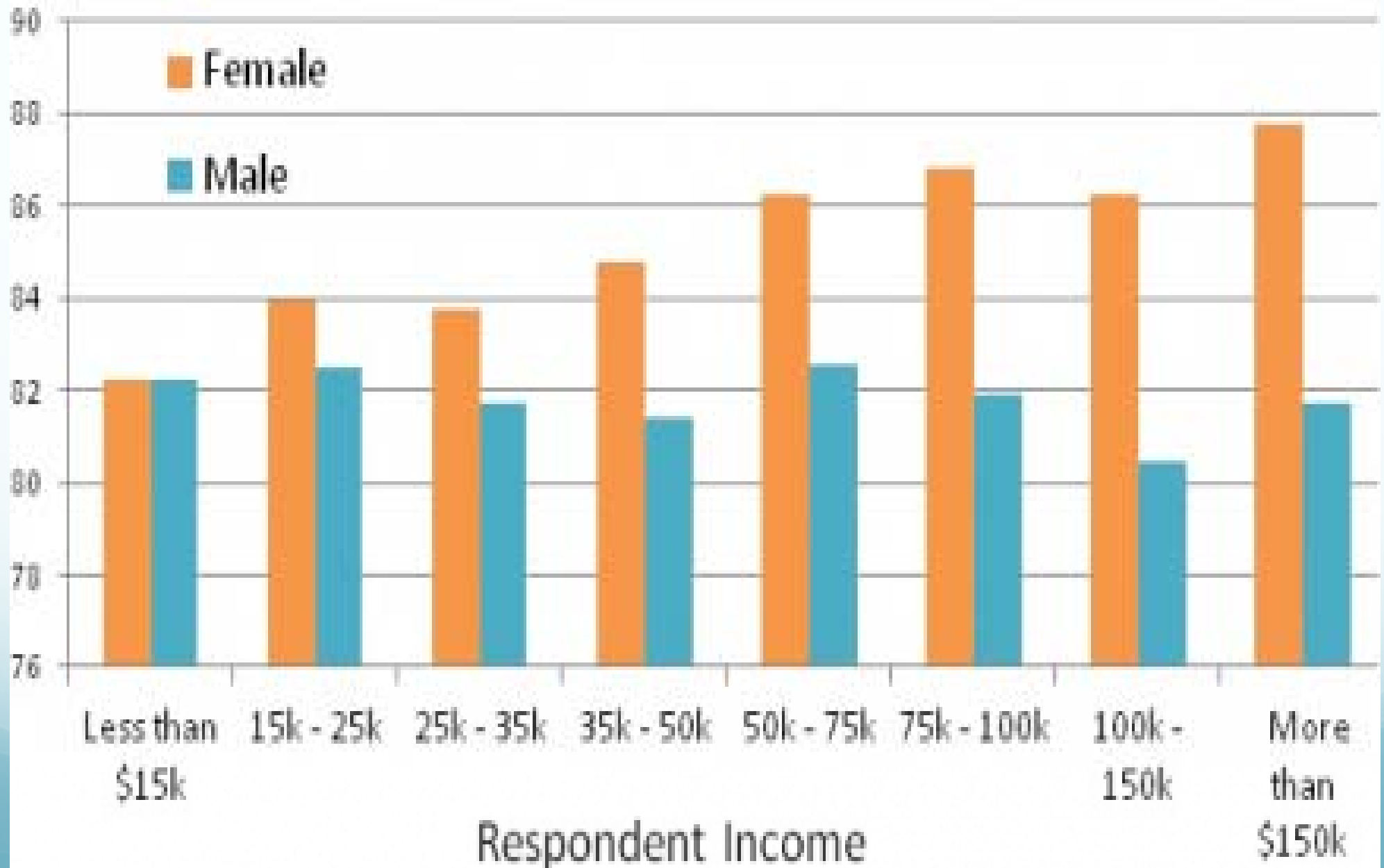




## Differences in Altruism by Gender and Age



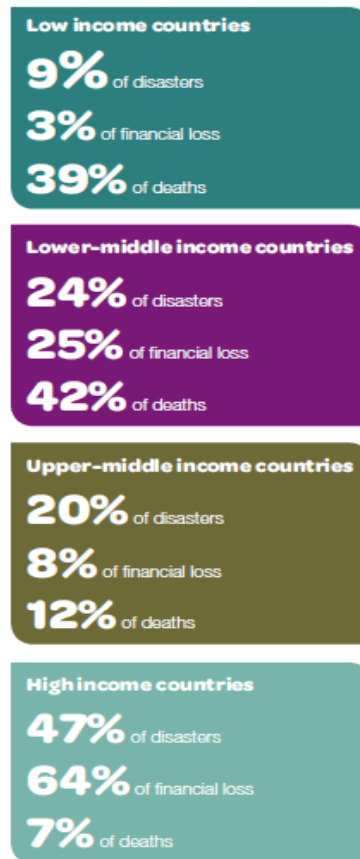
# Interactions of Gender and Income on Altruism



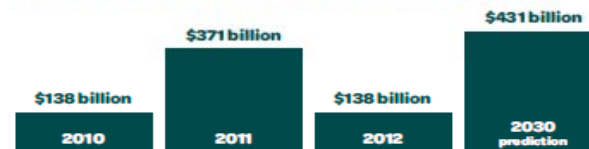
# DISASTERS UNDERMINE DEVELOPMENT

Every aspect of sustainable development is undermined by disasters, whether social, economic or environmental.

## Disasters affect countries in different ways



## The economic impact of disasters is growing<sup>13</sup>



### In developed countries, growth cannot keep pace with disaster loss:

**Superstorm Sandy:** affected 24 states in the USA, cost US\$65 billion<sup>14</sup>.

**Great East Japan Earthquake:** US\$210 billion<sup>15</sup> in damages, the costliest disaster on record.

In OECD countries, since 1980, the risk of economic loss due to floods has increased by over 160%; loss due to tropical cyclones has increased by 265%<sup>16</sup>.

### Disasters in developing countries destroy gains built up over decades:

- Hurricane Ivan (2004) cost Grenada over 200% of gross domestic product (GDP) and the earthquake in Haiti (2010) reached costs close to 120%<sup>17</sup>.

- In larger economies, such as Bangladesh or Mozambique, the loss of 3 to 5% of GDP every five to ten years has a heavy cumulative impact on development<sup>18</sup>.

## The social impact of disasters expose inequities and keep the poorest poor

**Low-income and lower-middle income countries have accounted for only 33% of disasters, but 81% of all deaths.**

**In the 2004 Tsunami children made up a third of all deaths<sup>19</sup>.**

### Disasters trap people in poverty:

**Haiti:** Numbers of poor fell 8% between 2001 and 2010. After the 2010 earthquake it was back to 2001 levels<sup>20</sup>.

**Pakistan:** The 2000-2001 drought in Sindh province increased poverty by up to 15%<sup>21</sup>.

**Philippines:** Typhoons Ondoy and Pepeng nearly doubled poverty in Rizal province in just three years, from 5.5% to 9.5%<sup>22</sup>.

### The future for the poor is bleak without action:

Up to 325 million extremely poor people will be living in the 49 most hazard-prone countries in 2030<sup>23</sup>.

## Inadequate investments in DRR lead to massive levels of emergency response

Since 1991 the international community has spent US\$69.9 billion in response to disasters, and only US\$13.5 billion on risk reduction<sup>24</sup>.

US\$69.9 billion in response to disasters

US\$13.5 billion on risk reduction

# RISKS ARE GROWING

Unchecked by the integration of risk into development, the impact of disasters will grow and grow. Development must be risk-proofed now, so as to prevent massive losses of life, livelihoods and growth in the future.



# Disaster risk reduction delivers on development

***Development is never disaster neutral; it creates, exacerbates or reduces risk. Disaster risk reduction is a no-regret investment that protects lives, property, schools, businesses and employment.***

## Disaster risk reduction saves lives and livelihoods

### Bangladesh

**1991** category four cyclone made landfall south of Chittagong: 138,000 killed.

#### Risk Reduction:

**Significant investments in embankments and protective mangrove planting; early-warning, risk awareness and contingency planning; and the construction of cyclone shelters.**

**2008** a category five cyclone struck the low-lying west, resulting in approximately 10,000 killed.

### India

**1999** a category four cyclone struck the state of Odisha. Deaths were as high as 15,000<sup>27</sup>.

#### Risk Reduction:

**Odisha becomes the first state to have a dedicated disaster management agency. It builds cyclone shelters, evacuation routes and coastal embankments. It conducts contingency planning drills every year.**

**2013** category five cyclone Phailin, strikes North-East India, 38 deaths recorded<sup>28</sup>.

**Disasters impact on every aspect of life and living targeted by the Millennium Development Goals**

**Millennium Development Goals**

**Disaster Risk Reduction protects life and living, and is fundamental to achieving Development Goals**

**In Aceh, the 2004 tsunami** is estimated to have increased the proportion of people living below the poverty line from 30 – 50%.



**1 Eradicate extreme poverty and hunger**

**Better land use planning** enhances food productivity and strengthens sustainability.

**The 2008 Sichuan earthquake** destroyed 7000 classrooms.



**2 Achieve universal primary education**

Only through **building earthquake-proof schools** can seismic-prone countries and regions protect children and their education.

**61% of those that died in Cyclone Nargis** in Myanmar, were female.



**3 Promote gender equality and empower women**

**Participatory DRR puts women at the forefront** of protecting and sustaining their communities.

**The 2005-2006 Drought in the Horn of Africa** increased child wasting up to 8%, and up to 25% for pastoralist communities<sup>29</sup>.



**4 Reduce child mortality**

**Training schoolchildren in a knowledge of disaster risk**, first aid and emergency lives, saves both theirs and adult lives.

**During the 2005 Pakistan earthquake**, the estimated number of pregnant women in the affected areas was 40,000.



**5 Improve maternal health**

**Shelters** built to protect communities against natural hazards **can function as medical facilities or schools** in times of disaster.

There were over 17,000 cases of diarrheal disease after **flooding in Bangladesh in 2004**.



**6 Combat HIV/AIDS, malaria and other diseases**

**Water and sanitation systems built to hazard-resistant standards**, can resist becoming a breeding ground for disease.

**Cyclone Nargis** affected about 16,800 ha (41,514 acres) of natural forest and 21,000 ha (51,892 acres) of forest plantations<sup>30</sup>.

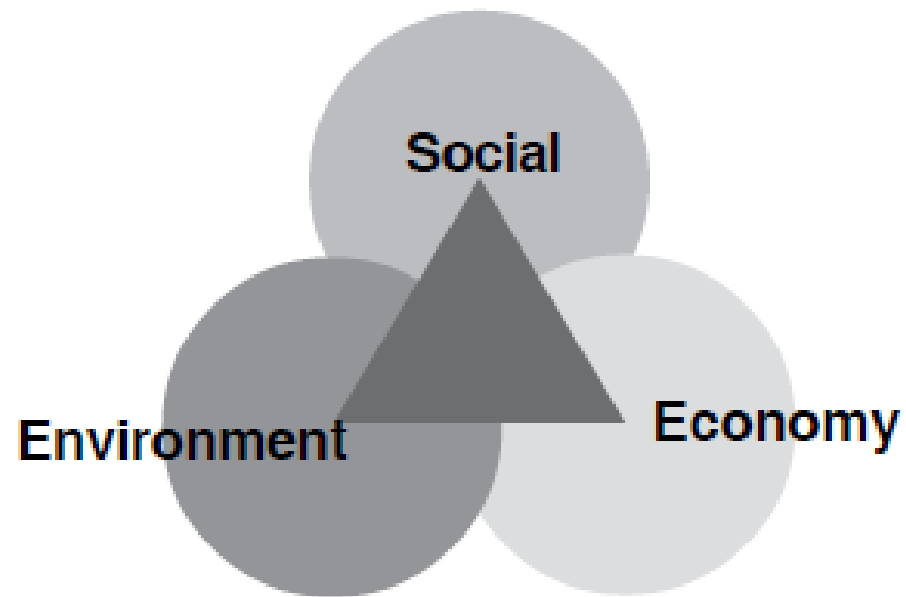


**7 Ensure environmental sustainability**

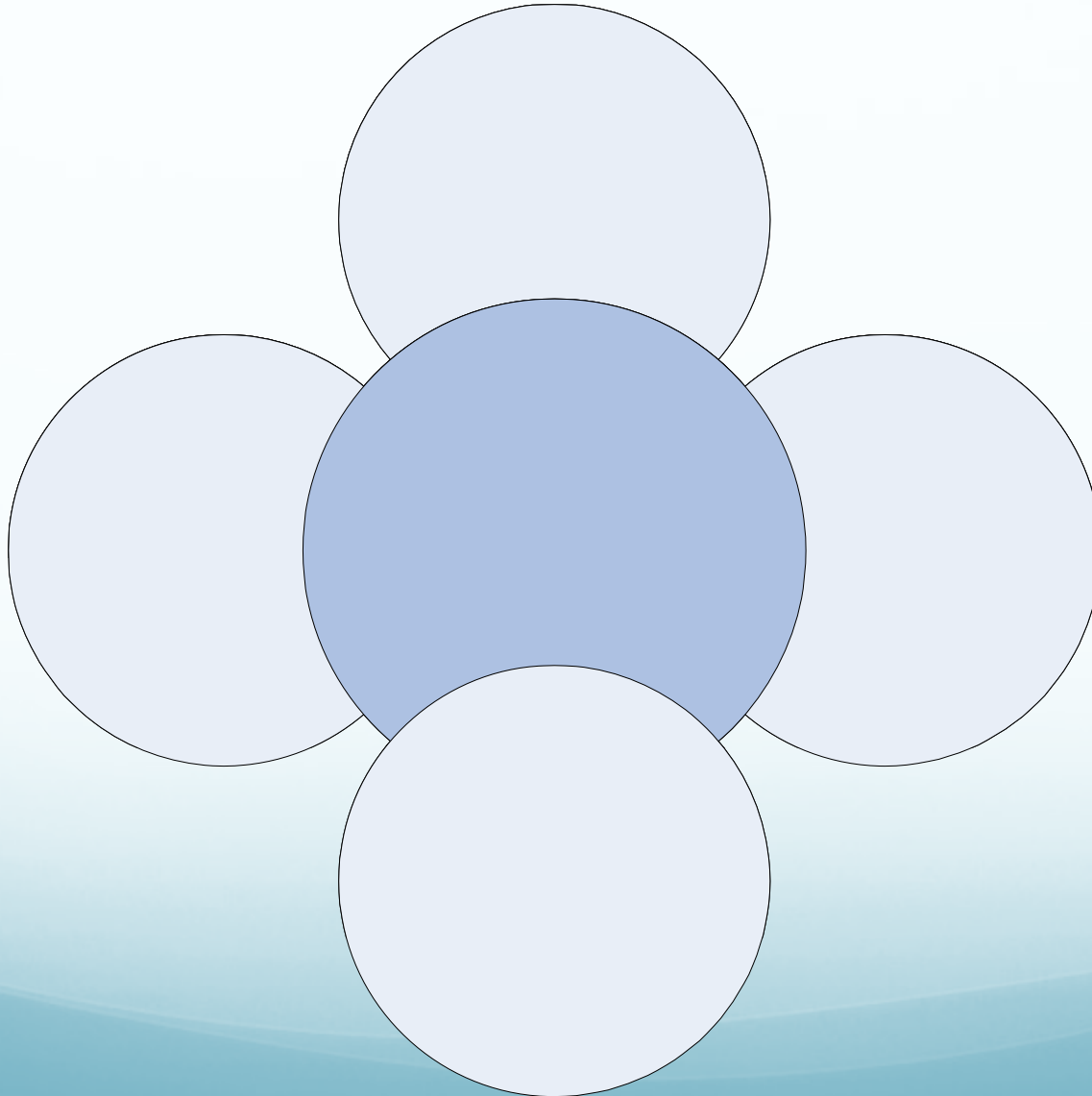
**Switching** from traditional trades in woodcutting in drought-prone areas to **sustainable agriculture**, can both reduce deforestation and provide a more secure form of income.

# Sustainable Development

## Dimension of Sustainability

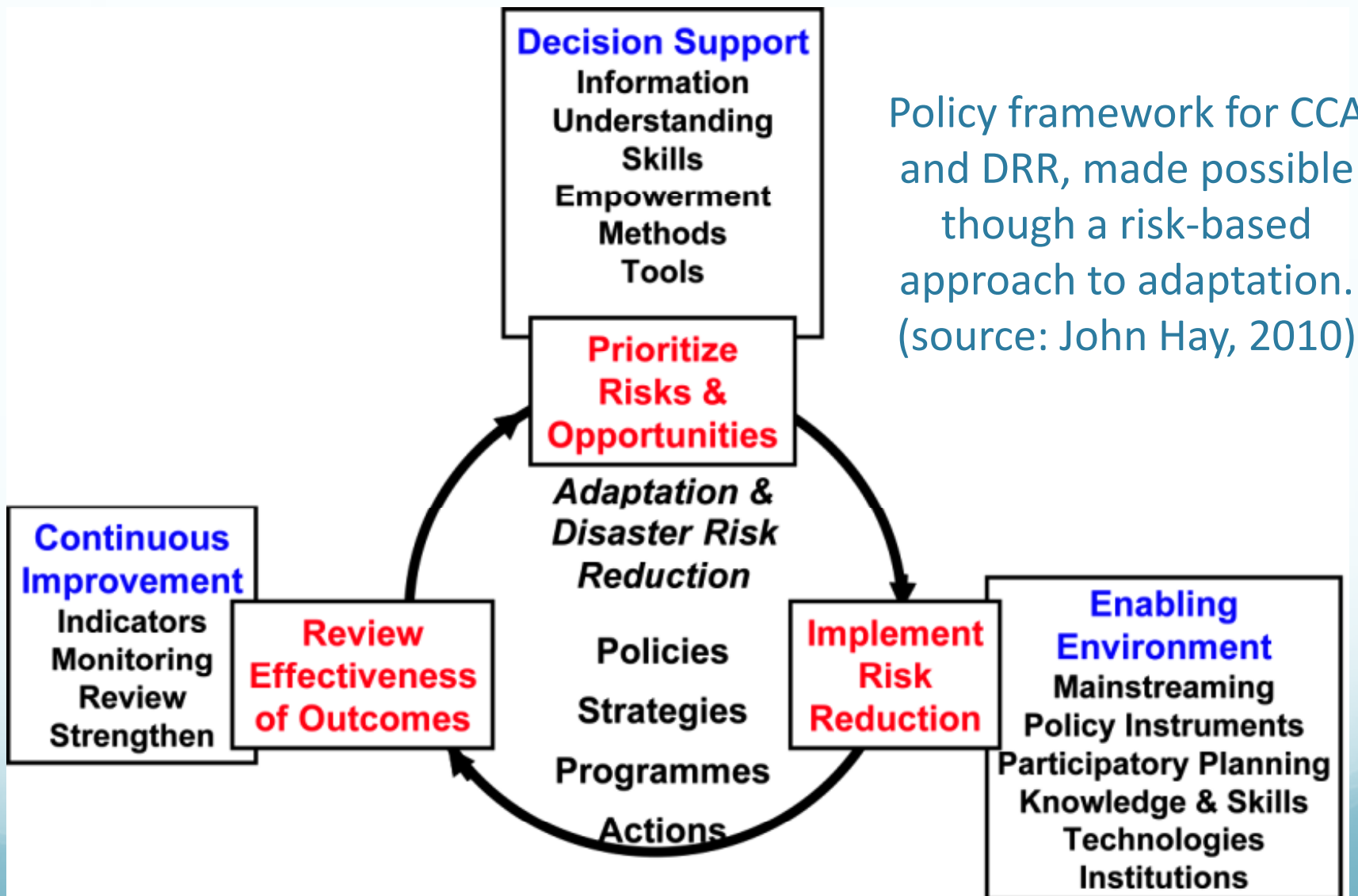


# Institutional Typology



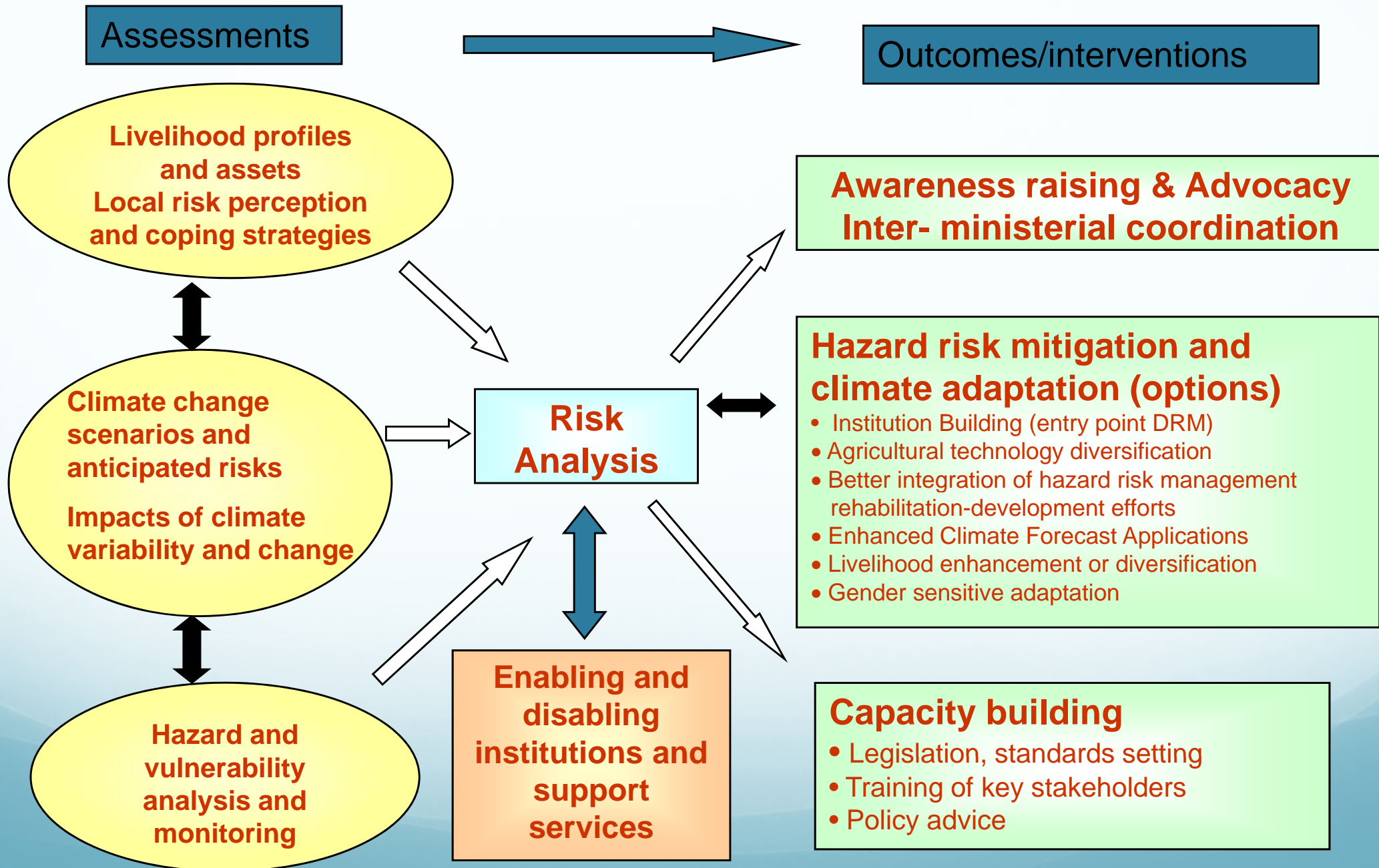


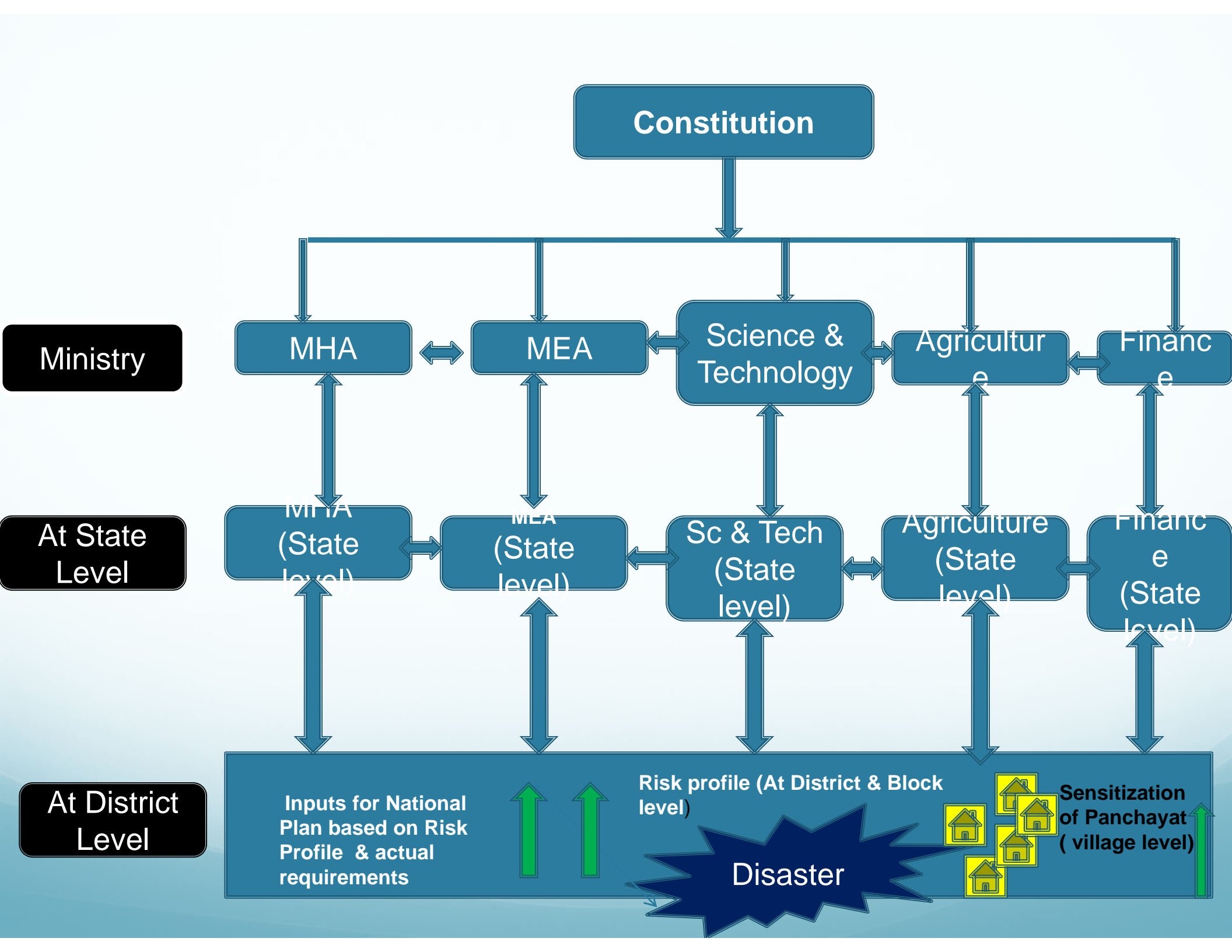
# Enabling Environment Typology





# Analytical Framework







# THANK YOU

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