



Post-Disaster Lessons from the Indian Ocean Tsunami and Other Large Disasters

Asian Disaster Preparedness Center

Presentation Structure

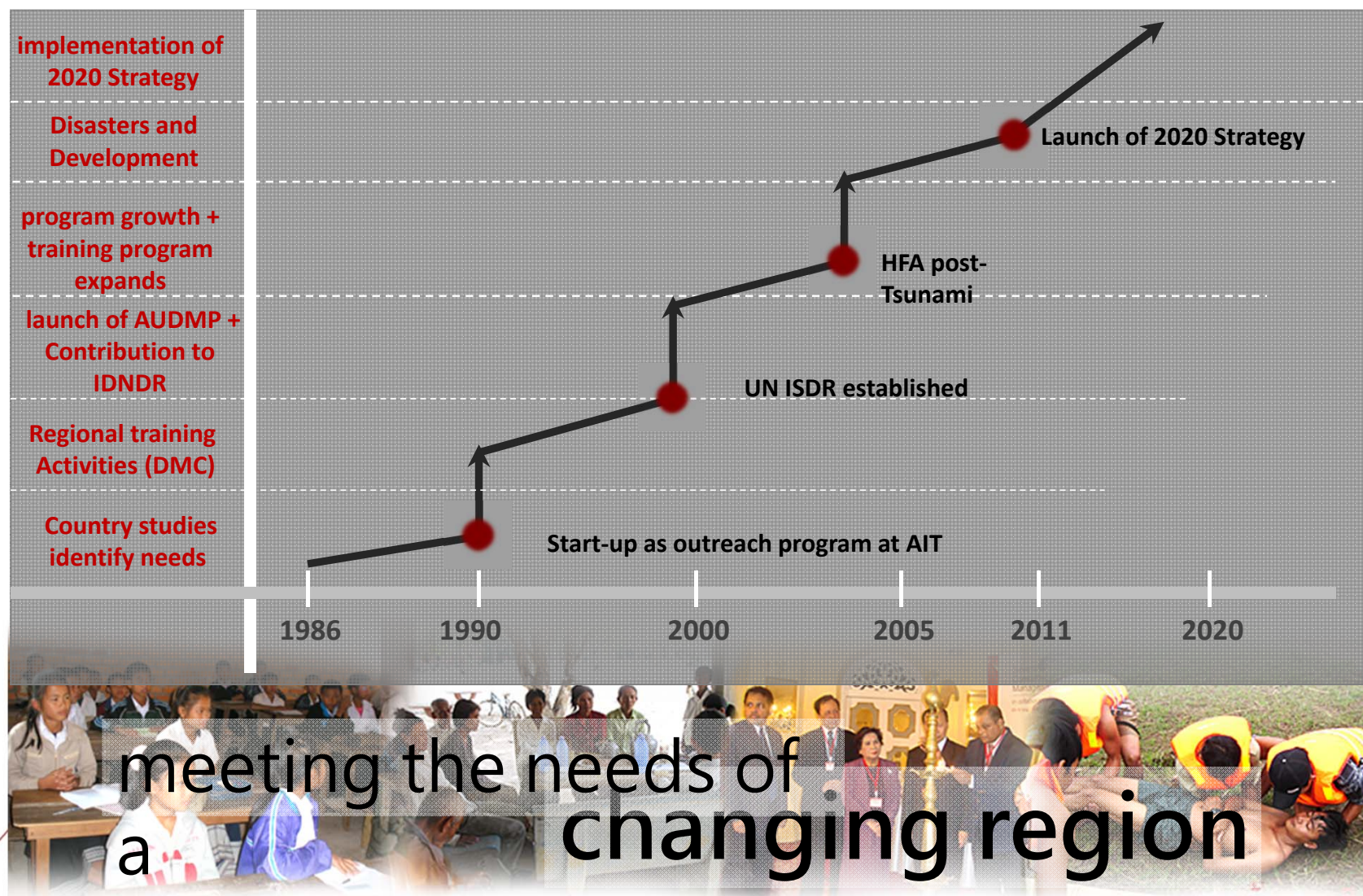
- Brief introduction to ADPC
- Large-scale recovery: the lessons from the 2004 Indian Ocean Tsunami
- Anticipating future disasters: building country capacities to assess and recover more quickly

During December 2014, ADPC will hold several events to commemorate the 10-year anniversary of the Tsunami.

ADPC's Vision:

Safer communities and sustainable development through
disaster risk reduction

Our story



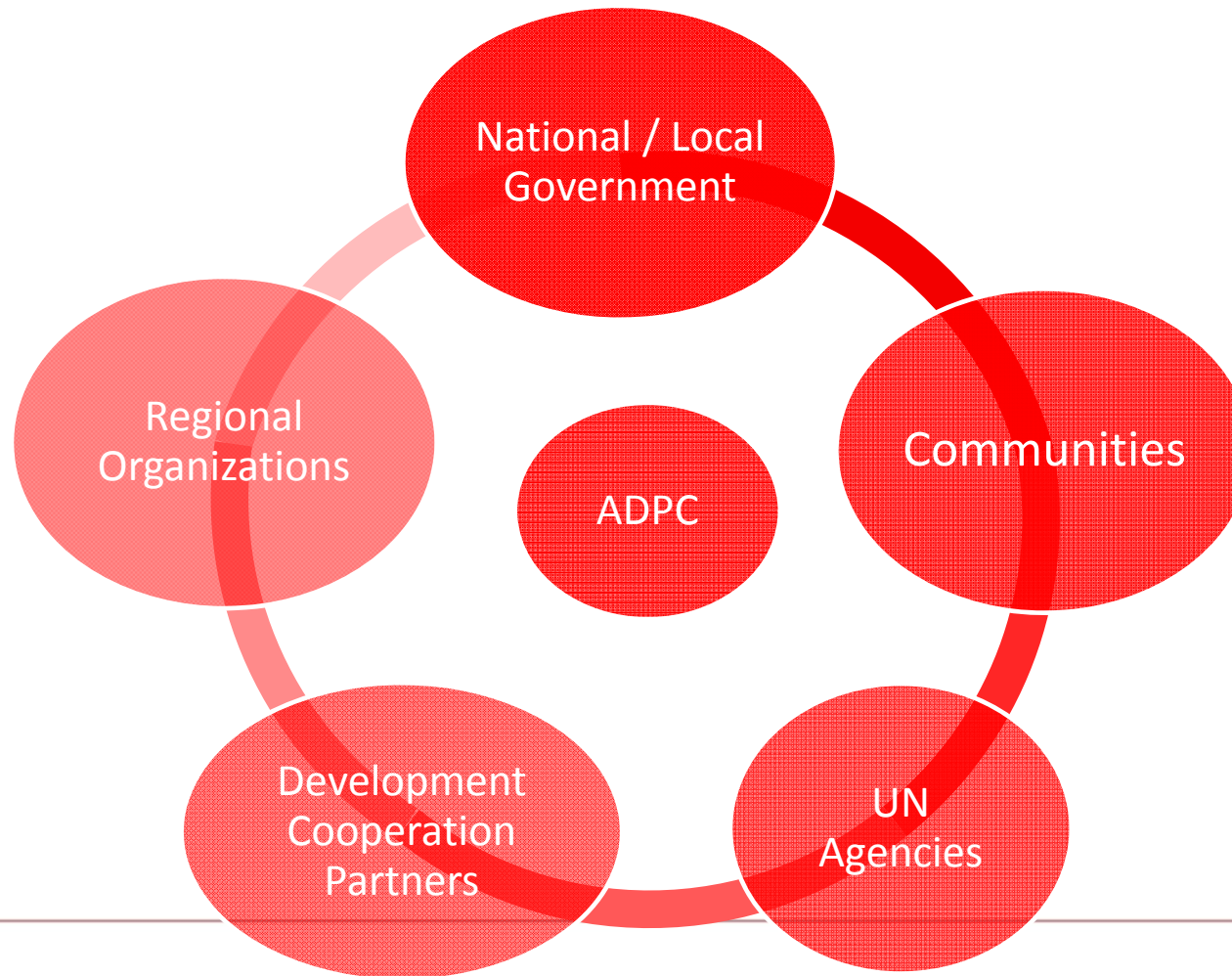
Our Approach

Science, System, Application



- ADPC uses science-based approaches to **identify**, **quantify** and **understand** risk
- Strengthening **effective governance** systems for managing disaster and climate risks and **institutionalizing** disaster risk management
- Incorporating disaster risk reduction into **development processes**

How we work

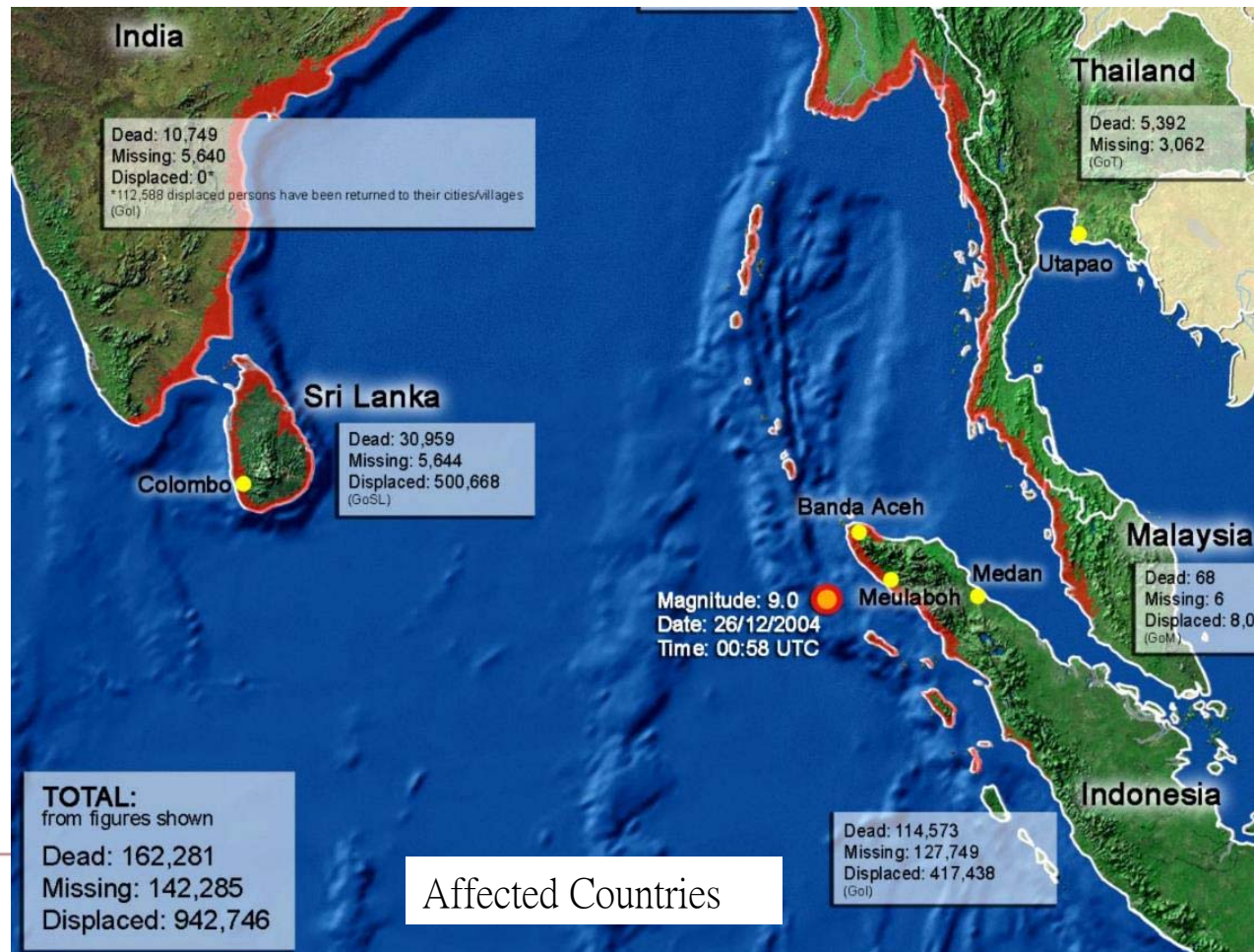


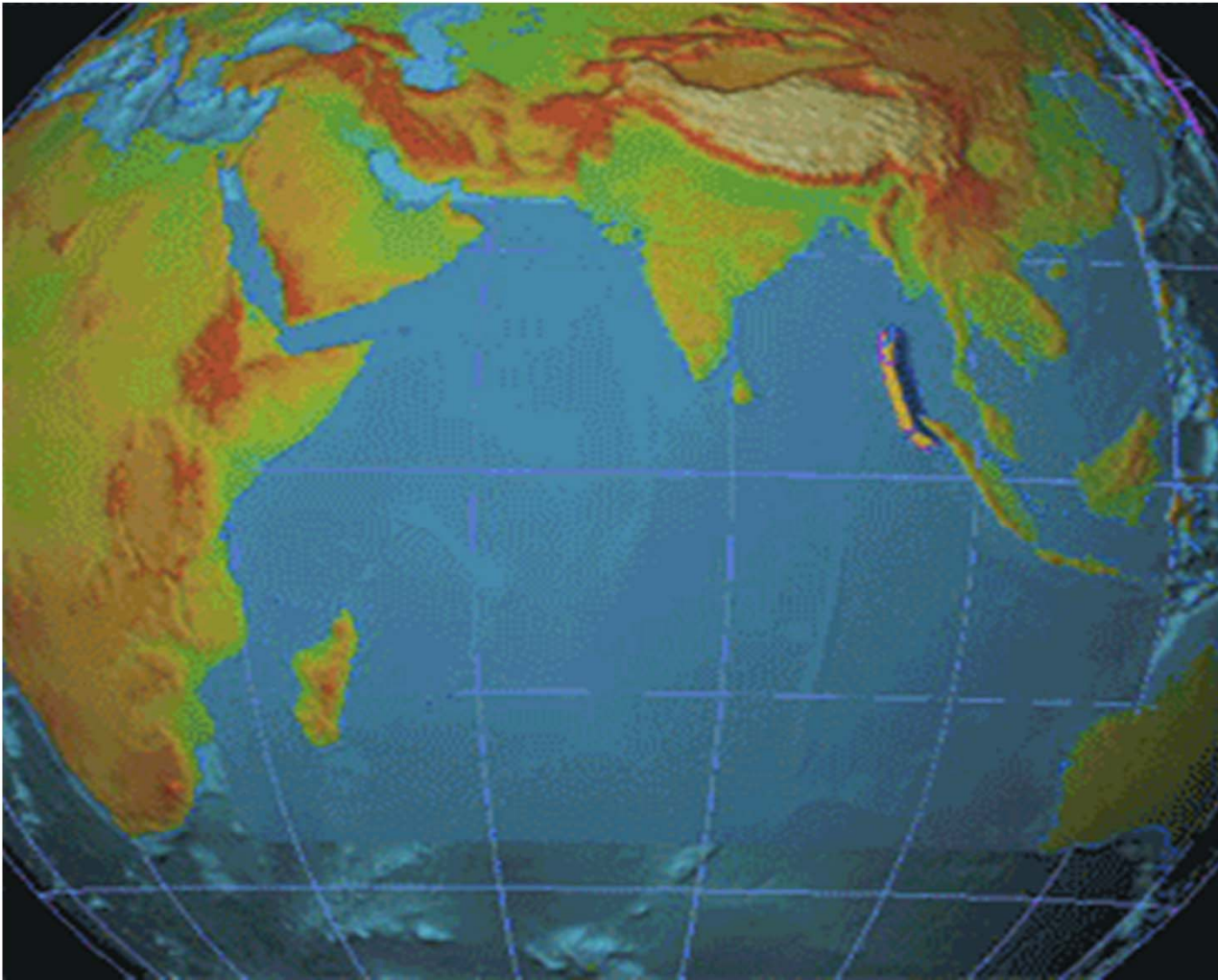
Our expertise

- Climate Change and Climate Risk Management
- Disaster Risk Assessment and Monitoring
- Disaster Risk Management Systems
- Public Health in Emergencies
- Resilient Cities and Urban Risk Management
- Safer Development Planning and Implementation

Large-scale recovery: the lessons from the 2004 Indian Ocean Tsunami

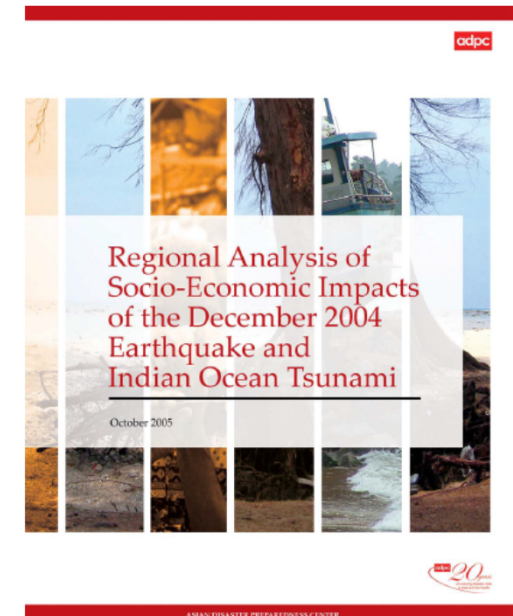
Large-scale recovery: the lessons from the 2004 Indian Ocean Tsunami



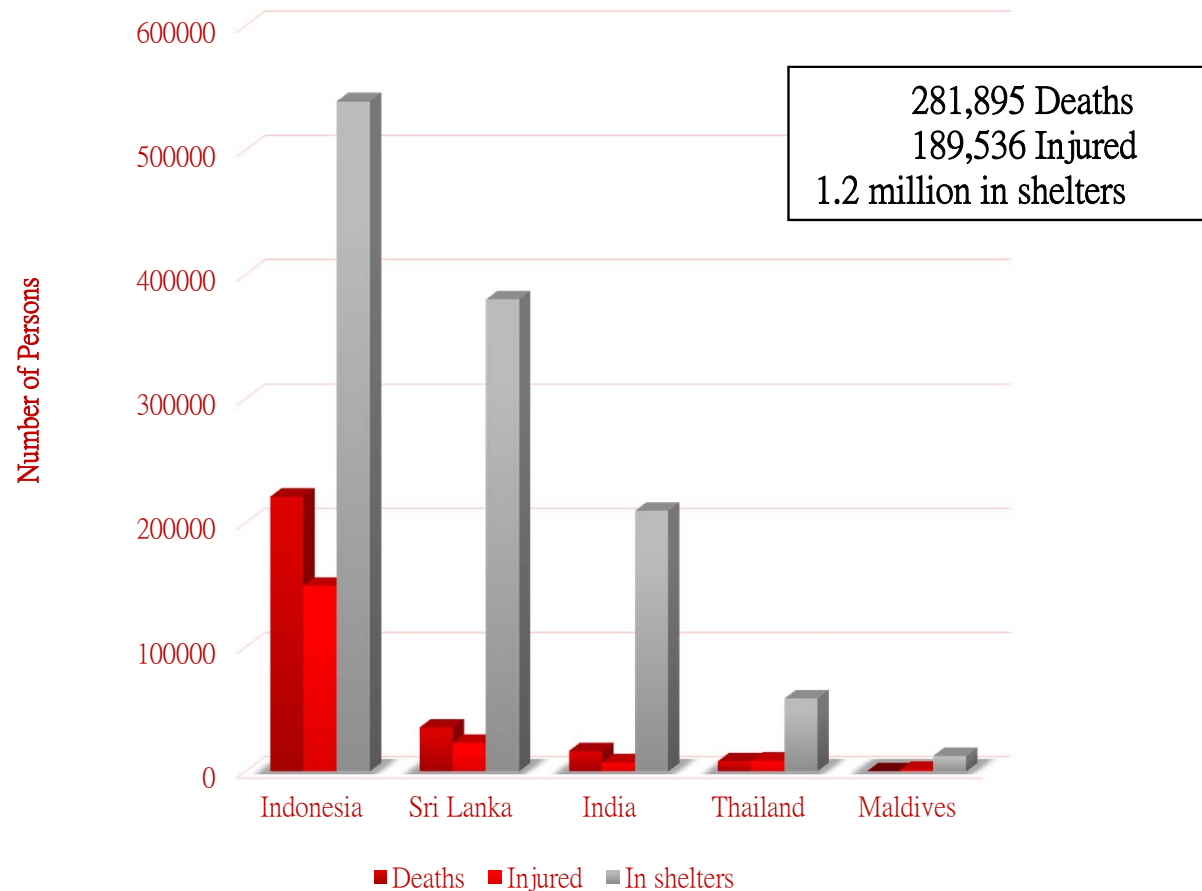


Understanding the Tsunami's Impacts: Regional Analysis of Socio-Economic Impacts

- The magnitude and extent of the human toll of the 26 December 2004 Earthquake and Indian Ocean Tsunami caused widespread destruction and mobilized an enormous effort for humanitarian assistance never seen in the past.
- Objective: *to determine the immediate and medium-term economic impacts of the 26 December 2004 disaster*
- A comparative study to determine the impact of the disaster on the five most affected countries

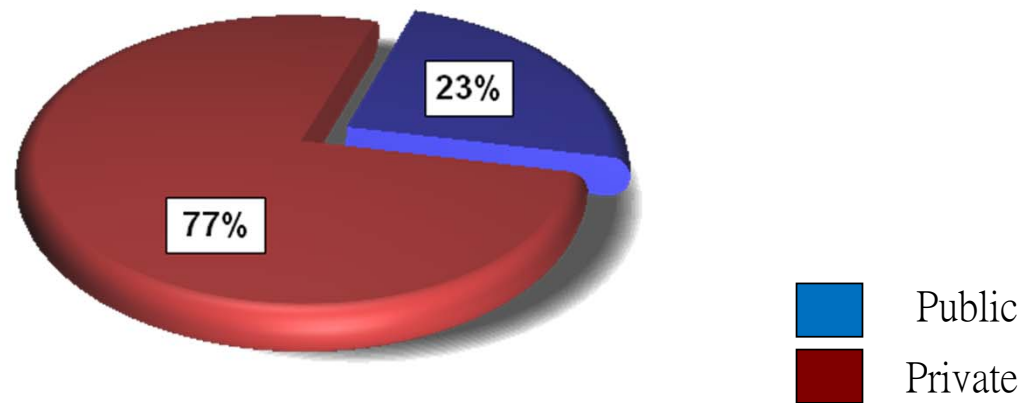


Population Impacts: Human Toll and Suffering



Total Impact and Ownership

Total impact of the disaster was estimated at US\$ 10 billion

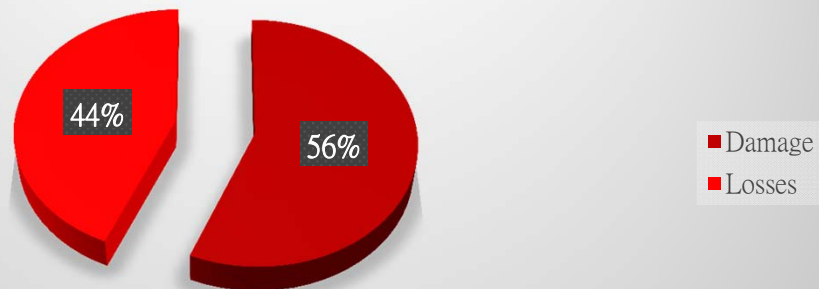


Public Private

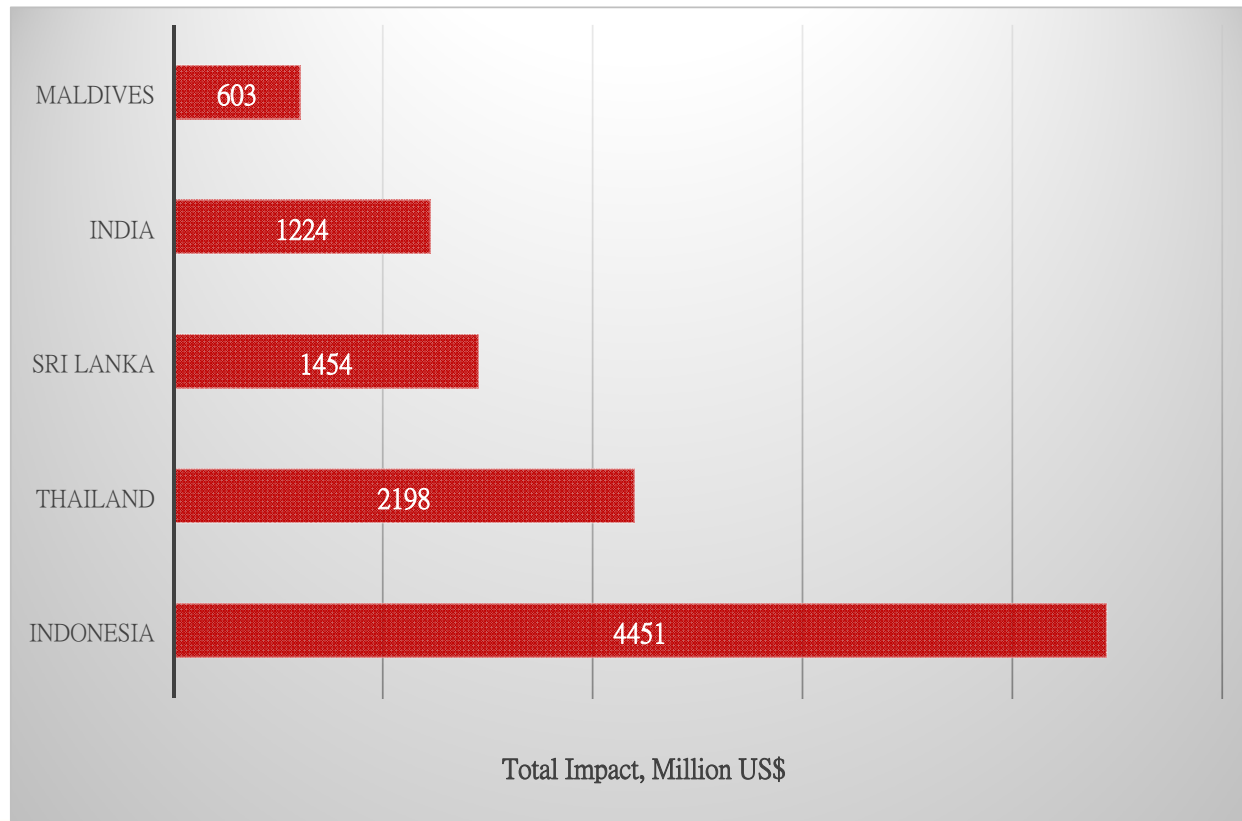
Types of Effects

The total impact is divided as follows:

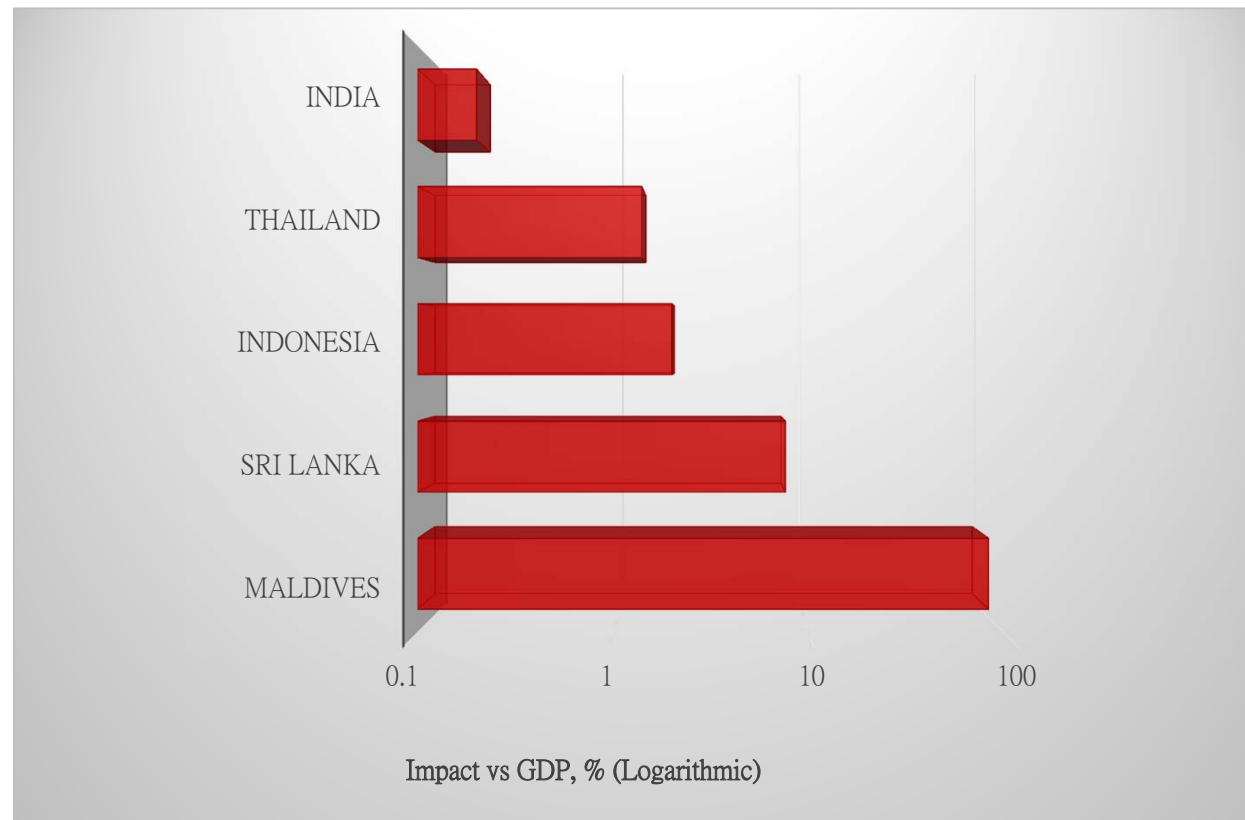
Physical Damage: US\$ 5.5 billion
Economic Losses: US\$ 4.3 billion



Total Impact by Countries



Magnitude of Disaster by Country



Summary of Impact

	Impact, million US\$		
	Damage	Losses	Total
Social Sectors	<u>2,531</u>	<u>122</u>	<u>2,653</u>
Housing	2,120	76	2,196
Health	199	28	227
Education	212	18	230
Productive Sectors	<u>1,559</u>	<u>3,308</u>	<u>4,867</u>
Agriculture and livestock	121	170	291
Fisheries	520	967	1,487
Industry and Commerce	193	541	734
Tourism	726	1,630	2,356
Infrastructure	<u>1,136</u>	<u>500</u>	<u>1,636</u>
Water and Sanitation	103	16	119
Electricity	94	10	104
Transport	749	185	934
Other works	190	290	480
Environment	<u>175</u>	<u>394</u>	<u>569</u>
Others	<u>196</u>	<u>9</u>	<u>205</u>
TOTAL	<u>5,597</u>	<u>4,333</u>	<u>9,930</u>

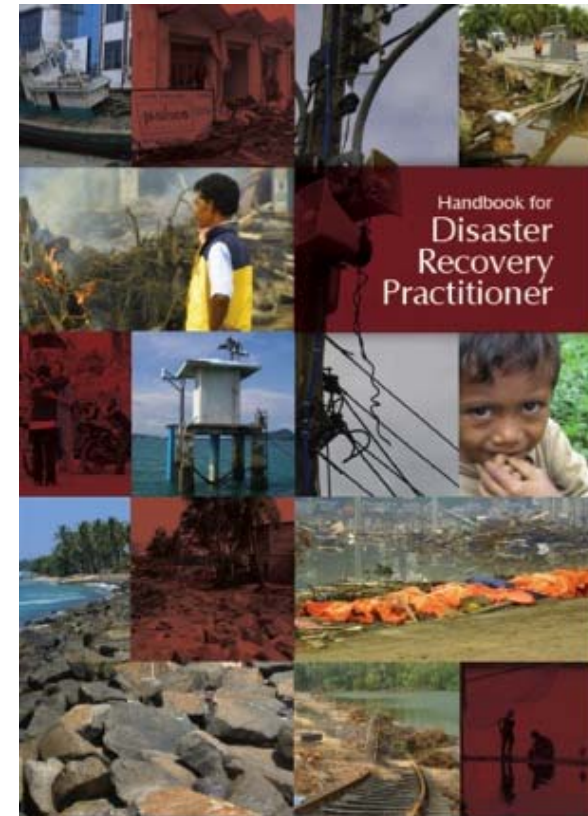
Sector Impacts: some conclusions

- **Housing and transport were the most affected sectors** in terms of assets, followed by tourism and fisheries
- **Losses were concentrated in the sectors of tourism, fisheries, and industry and commerce**
- **Lower income individuals lost their home assets as well as their income and livelihood**, mostly from tourism employment, fisheries, and small to medium sized enterprises
- **Entrepreneurs sustained very high asset destruction and significant income losses** in tourism and in other productive sectors
- **Government assets and services in the transport and other sectors were destroyed and interrupted**

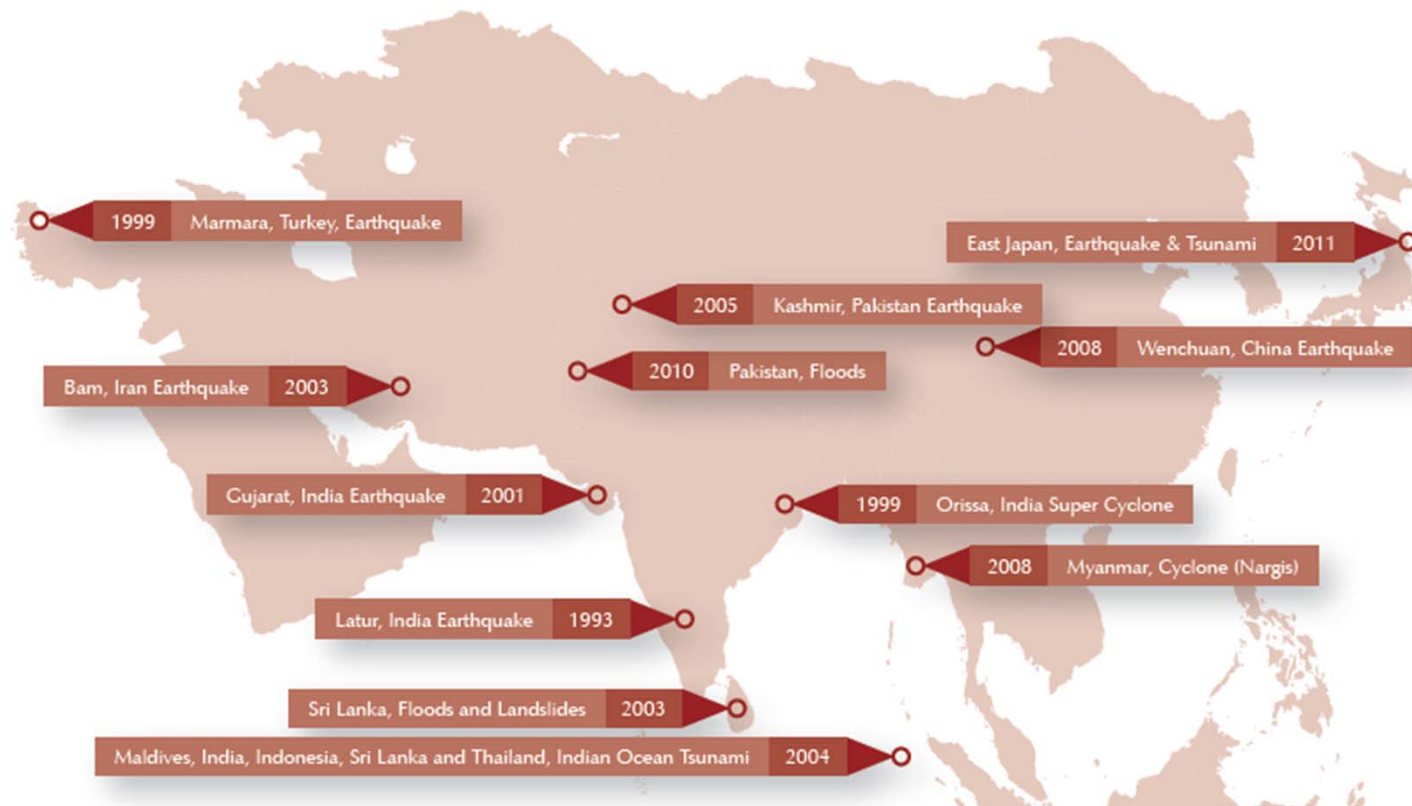
From Impacts to Recovery

Disaster Recovery Toolkit

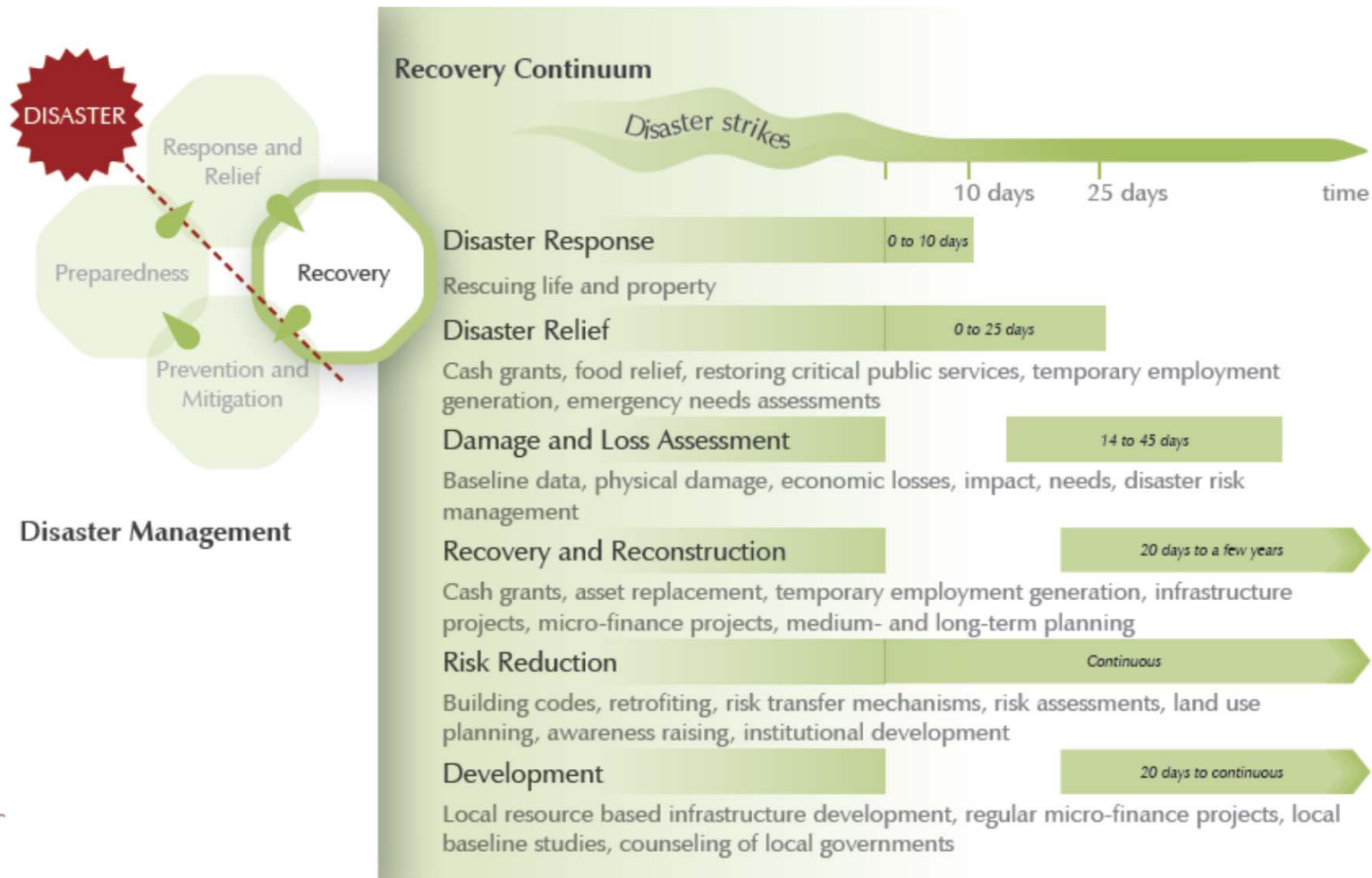
- Tsunami Global Lessons Learned Project (India, Indonesia, Maldives, Sri Lanka, Thailand and UN and IFRC), *supported by* IFRC, UNDP and WFP
 1. Handbook for Disaster Recovery Practitioners
 2. Technical Guidelines on “Build back better” ,
 - Housing,
 - Land Use Planning,
 - Critical Facilities and
 - Livelihoods
 3. Training course on Recovery and Reconstruction Program Implementation



Draws post-disaster recovery lessons from not only the Indian Ocean Tsunami...



Finding: Post-Disaster Processes



In the case of Aceh-Nias after the Indian Ocean Tsunami 2004:



Anticipating future disasters:
building country capacities to
assess and recover more
quickly

Anticipating future disasters: building country capacities to assess and recover more quickly

- One of the key lessons from the Indian Ocean Tsunami and other large disasters:
 - Assessment of disaster damages, loss, and needs is essential for effective recovery and reconstruction.
 - If we don't know the impacts, how can we recover well?



Anticipating future disasters: wise investment to build systems & capacities for assessment and recovery planning, before the next disaster

- Post-Disaster Needs Assessment is an international methodology which involves the timely and accurate estimation of damages, losses, impacts, and needs across different sectors such as transportation, health, and agriculture.
- The assessment feeds directly into recovery planning, which aims to re-establish basic public services to normalize the socio-economic conditions, as well as source capital investments for long-term reconstruction.

PDNA timeline

Hazardous Event

- Emergency Relief

Planning Stage – Week 1

- Baseline Data Collection
- Agree on TOR
- Team Composition Methodology
- Training on DALA

Assessment Stage – Week 2

- Field Survey
- Sector by Sector Assessment
- Calculate DALA
- Human Needs Assessment

Dissemination Stage – Week 4

- Publish and Launch the PDNA

Analysis Stage – Week 3

- Macro Analysis
- Report Drafting
- Estimate Reconstruction and Recovery Needs

Anticipating future disasters: ADPC's contribution

- ADPC is supporting multiple countries to institutionalize post-disaster needs assessment and recovery planning, with the following principles:
 - The processes are country-specific and aim to high efficacy
 - Guidelines are easy to understand and easily accessible
 - Guidelines are practical at the sub-national levels
 - Capacities are built based on country-specific processes
 - Pools of trained officials are established and engaged in each country

Please do visit: www.adpc.net/pdna for more information and publications on this topic.

THANK YOU

FOR YOUR ATTENTION



<http://www.adpc.net>



<http://www.drrprojects.net>



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