

# The Built Environment Professions in Disaster Risk Reduction and Response

A guide for humanitarian agencies







Indian Ocean Tsunami



Kashmir Earthquake



Hurricane Katrina

Tsunami Recovery Network

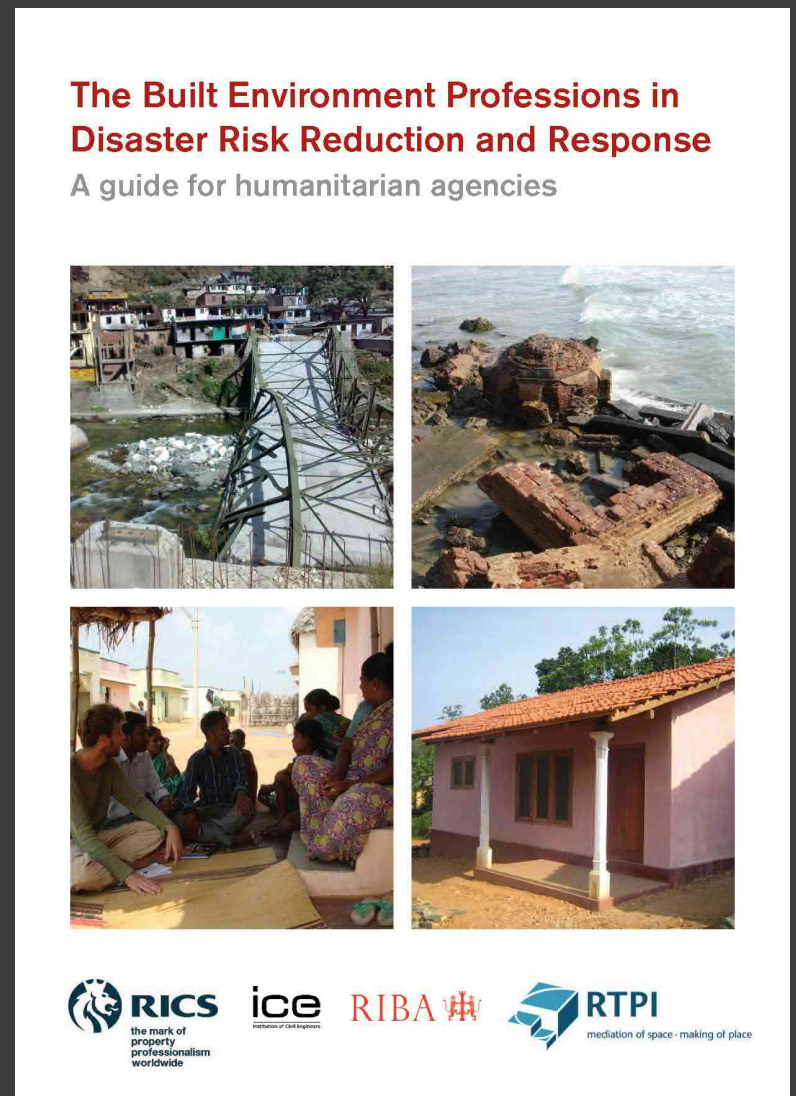
 **RICS**  
Major Disaster Management Commission

Development from Disasters Network

**UNIVERSITY OF WESTMINSTER**



2004

2005

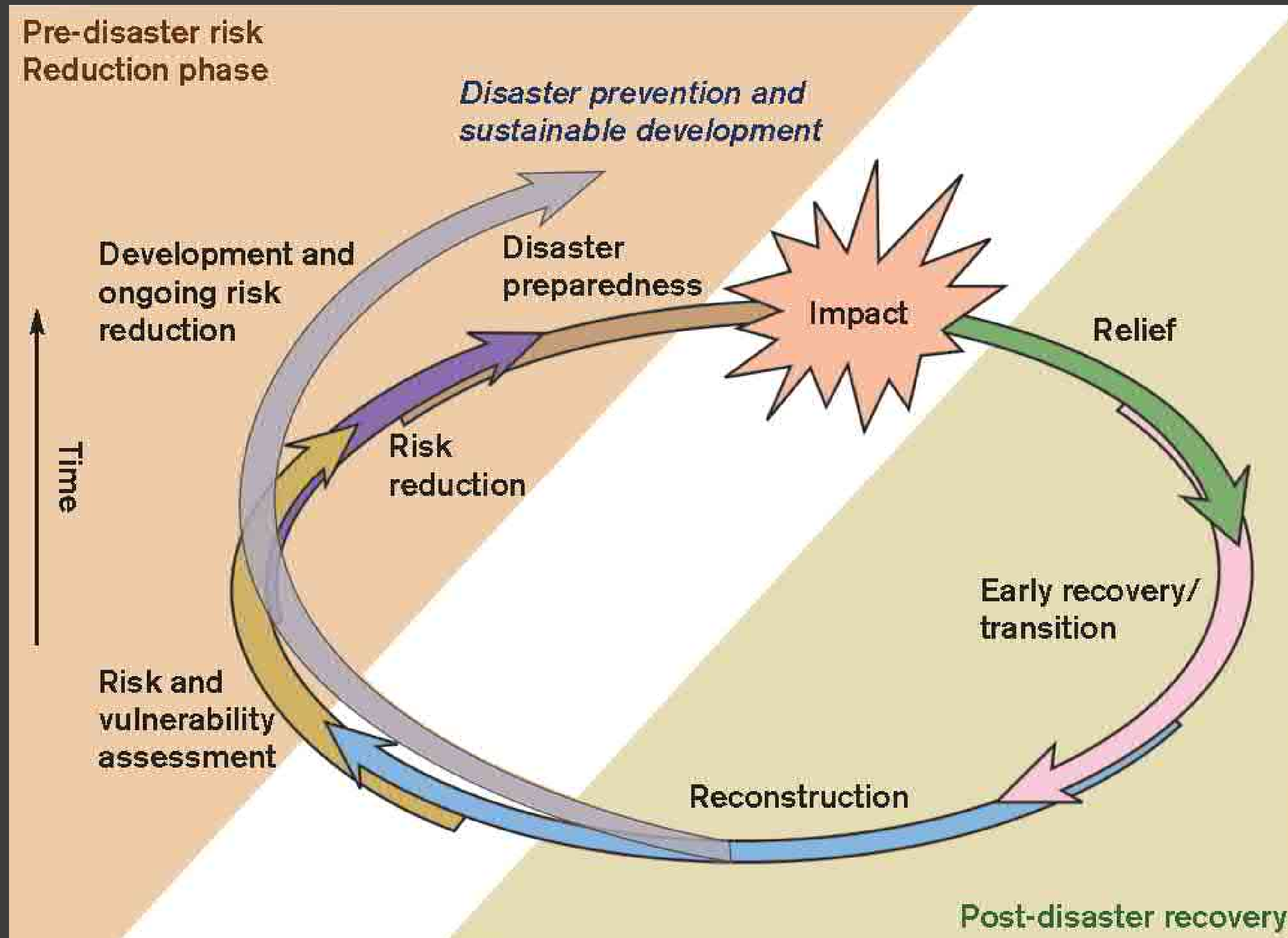
2006

2009

## Challenges in deploying built environment professionals

- Lack of understanding of what each discipline does
- Overlapping roles and expertise
- Misunderstandings through professional jargon
- Lack of information on how to employ a built environment professional

# Disaster Risk Management and Response Spiral



Activities	Roles of professionals			
Phases <sup>14</sup>	Architects	Surveyors	Planners	Engineers
Risk and vulnerability assessment				
Disaster risk reduction and mitigation				
Disaster preparedness and pre-disaster planning				
Emergency relief				
Early recovery/transition				
Reconstruction				
Post reconstruction development and review				



# Disaster stage

# Role of built environment professionals within activity

Activities		Roles of professionals				
		Architects	Surveyors	Planners	Engineers	
Emergency relief	<b>Logistical planning</b> Establishing access to disaster struck areas and planning for provision of emergency supplies and access for relief workers is a key challenge facing agencies in the immediate and often chaotic aftermath of disaster. Ensuring land and securing harvests, seeds livestock and food production often takes priority over shelter in rural communities in developing countries.		Advise on costs and procurement of goods and services. Establish land rights and rehabilitation for economic and subsistence reasons.	Evaluate local access issues and plan for transportation and storage/shelter for supplies, services and rescuers to the disaster area. Establish the priority needs and requirements of affected communities.	Provide technical solutions for delivery of material and people to affected areas and secure storage of essential supplies.	
		<b>Relief shelters and sheltering material</b> Relief shelters may be needed to protect people from the elements after a disaster. They have to be strong, micro-climatically appropriate and easy to install. They should also be sensitively designed for habitation by people who are likely to have been traumatised. They may be in active use for several years after reconstruction has been underway, so a degree of durability is also helpful. Designs should be lightweight and removable to permit re-use elsewhere.	Design relief shelters for dwellings as well as larger structures for essential services such as medical facilities and vulnerable groups that need special accommodation such as the sick and injured.	Advise on procurement of shelters; work with local authorities and communities to make the best use of local skills and labour.	Estimate the demand for relief shelter, including number, types and locations; consider medium/long-term issues associated with shelter locations and design (e.g. implications on income if shelters are some distance from employment locations).	Technical design of relief structures for bulk production/use; ensure designs are safe in the aftermath of disasters (e.g. safe from aftershocks in earthquake affected areas); ensure that shelters are safely located.
		<b>Project planning and management</b> Once basic and essential services are re-established, there is an immediate need for professionals to establish good lines of communication with each other, the local community and the relevant authorities. A co-ordinated response is required to assess the immediate and medium term priorities for affected communities and local authorities, come up with a strategic action plan and plan, manage and implement recovery projects.	Develop survey methods to facilitate the repair and reconstruction of dwellings, vital facilities, community buildings and heritage buildings.	Develop property survey methods; analyse procurement and funding requirements addressing shortages in material and labour. Review the reuse of local material and local labour capability.	Initial assessment of infrastructure recovery requirements, particularly access, energy, water and food storage. Liaise with stakeholders and the community and establishing feasible strategic plans for the area in the medium term.	Provide an assessment and delivery plan for of emergency civil works such as restoring access roads, providing temporary bridges, power generators and water tankers.

# Activities within disaster stage

## Need for a reissue:

- Align with the current condition of DRR+R
- Widen the agenda to include urban resilience, climate change, urban crises, conflict and population displacement
- Include recent experiences from the built environment professionals within DRR+R

**“ What is the current value  
of built environment  
professionals in disaster risk  
reduction and response? ”**



## Breakout Sessions

What is the current value of built environment professionals in the...

- 1 *risk reduction and mitigation*
- 2 *emergency relief*
- 3 *early recovery/transition*

...stages of the disaster risk management cycle?