

## FIG Working Week- Hong Kong

### RICS President's Commission on Major Disaster Management

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### RICS President's Commission on Major Disaster Management

- Origins & Impetus - An inconvenient truth!
- Strategic thinking
- Verification - Mind the gap
- Role of the Built Environment Professional
- Building Bridges
- Achievements
- Future issues



### Key Facts

- There has been a five-fold increase in disasters from 1975 to 2005
- 2.5 Billion people were affected by disasters in the decade from 1995 to 2005
- 98% of these people were from developing countries
- In 2006 alone there were 395 natural disasters affecting 134.5m people worldwide, causing \$19m worth of damage



### Origins of the Commission

#### Indian Ocean tsunami



- The Indian Ocean tsunami had reached heights of up to 33ft (10m) when it crashed ashore
- When the wave reached the coast, the shallow water caused it to slow from 500mph to about 20mph, and to rear up into a wall of water up to 33ft high
- In Sri Lanka the tsunami was "only" a little less than 4 m in height when it reached the southwestern coast, yet it still had enough power to throw a train off the rails and kill more than 1000 passengers.



## Cost of Disasters

- With the 2004 Indian Ocean Tsunami alone:
- Total damages: \$10.73 billion
- Rebuilding costs: “10.375 billion
- Number of people displaced: 2,089,883
- Number of houses reduced to rubble: 392,544
- Number built or under construction: 46,000



## Why the Surveying Profession?

- Land
- Real estate
- Construction
- Environment

... the whole lifecycle of land and property  
- 70% of global wealth



## President's Commission on Major Disaster Management

- RICS, Founded 1868, Non-profit
- Royal Charter : public interest
- FIG member
- Commission 8, Munich Declaration

.....President's Commission March 2005



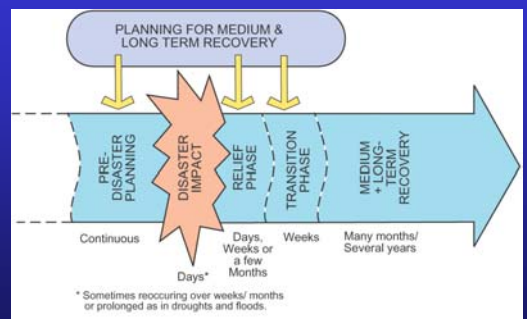
## President's Commission on Major Disaster Management

### Mission:

*“To use the skills and knowledge of RICS members to help communities to strengthen their capacity to mitigate the effects of major natural and man-made disasters affecting the built environment”*



## Strategic Thinking



## Commission Objectives

Provide

- Framework to help the international community bridge the gap between relief and reconstruction
- Forum and bring together international stakeholders to address built environment issues
- Opportunities for RICS members to be directly involved in disaster relief and reconstruction work
- Humanitarian community with a conduit for advice on built environment issues.



## Humanitarian Aid Sector

Problems

- A gap exists between emergency relief and longer term reconstruction
- There is a lack of interaction with the private sector
- The NGO's are new to the built environment sector, and are carrying out reconstruction when they may not be the best placed to do so



### Mind the Gap! Post-disaster reconstruction and the transition from humanitarian relief



## Report Summary

“A gap exists between the humanitarian relief phase, and the permanent reconstruction and rehabilitation of affected households and communities. “

(NB - Dealing with Issues of long-term recovery from natural disasters)



## The Causes of the Gap

Stable and secure post-disaster recovery is constrained by:-

- Institutional constraints
- Gaps in communication
- Dispirit organisational needs of immediate response and long term response
- Failures in Management and planning



### Main findings:

#### Why reconstruction following major disasters takes too long

- Global implementation of disaster reduction policies is slow and has been overtaken by the increasing incidence of weather-related natural disasters.
- The funding of recovery from disasters is too inflexible and short term-focused.
- Local government capacity to plan and implement recovery strategies is usually very limited and often incapacitated as a result of the disaster.



**Main findings:  
Why reconstruction following  
major disasters takes *too* long**

- Small NGOs with the professional skills to deliver high quality, low-cost permanent buildings, working with survivors and making use of local materials and labour, *are often starved of funds.*
- Establishing and restoring property rights can be a major hurdle to reconstruction.
- More effort should be devoted to gathering information from community sources, to complement professional GIS techniques.



**Why there are Funding  
Problems**

The funding of recovery from disasters remains overly short-term in its focus, frustrating efforts to plan for a smooth transition from humanitarian relief to long-term recovery.



**Recovery, Risk Reduction and  
Development**

The report argues that successful **planning** for disaster relief and recovery is necessarily part and parcel of what should be a larger and permanent disaster management and disaster reduction effort.



**Report Conclusions:**

- The world needs a better system and to be better prepared for dealing with major disasters.
- International (aid) agencies are geared to a quick response in terms of humanitarian relief..... BUT disasters are also a *development* issue.
- The international community has no strategy for dealing with these longer-term development issues.



**The role of built environment professionals  
and the need for inter-disciplinary  
collaboration**

- At every stage, the built environment professions have invaluable expertise and a key role to play
- Working in multi-disciplinary teams and with local partners and intermediaries is essential.
- A special and new set of professional skills is required that needs to be shared across all the built environment professions.



**Disaster Management  
Surveyors' Key Skill Sets  
(1)**

- Geographic information
- Rapid assessment of extent of destruction from “before and after” satellite imagery
- Boundary demarcation and settling boundary disputes
- Dangerous structures
- Assessing structural damage



## Disaster Management Surveyors' Key Skill Sets (2)

- Specifying emergency repairs
- Planning and development
- Master planning
- Advice on finance, development controls
- Construction procurement
- Commissioning construction work



## Disaster Management Surveyors' Key Skill Sets (3)

- Project management and cost control
- Delivering completed projects on time and within budget
- Building Control
- Ensuring that proper building safety and quality standards are achieved



## The Way Forward

“It should be feasible to devise an effective framework for bridging the gap between short-term relief and long-term recovery, drawing on analysis of system failures and successes seen in past disasters.”



## RICS Initiative

### 1: Built Environment Community:

- international involvement
- expertises
- engaging private sector
- one-stop advice centre

### 2: Coalition of thought:

- Lobby for risk reduction
- Lobby for improved building codes



## The Gap Project

- **Phase 1: prove and analyse the gap**
- **Phase 2: design the methodology to produce a means of bridging the gap** (“Designing the Bridge” Salford University )
- **Phase 3: produce toolkit** (“ Bridging the Gap” externally-funded *major* project, delivery 2008)



## Phase II- Bridging the Gap

- Process Protocol
- Based on tested construction construction protocol
- Whole project view
- Early design certainty
- Consistent process
- Process flexibility
- Coordination
- Legacy archive
- Stakeholder involvement/ buy in



## UN Special Envoy for Tsunami Recovery

“it is crucial that all stakeholders buy into common standards, approaches and methodologies. All recovery processes would greatly benefit from having a single information structure that can collect, analyse and disseminate information, and that would have buy in from local stakeholders, including government, NGO’s, donors and UN agencies”

Bill Clinton



## Achievements to date

- Brought together International stakeholders
- Framework opportunity in Process Protocol
- Building opportunities for surveyor direct involvement
- Advice line, a valuable conduit for humanitarian community



## Future Challenges

- Progressing Phase III- Bridges
- Private sector - Involvement



## Reconstruction...

**Build Back Better!**



**Thank you**

[www.rics.org/disastermanagement](http://www.rics.org/disastermanagement)

