

The Climate Change Challenge for Land Professionals



Stig Enemark, FIG Honorary President

ENGAGING THE CHALLENGES, ENHANCING THE RELEVANCE
XXV FIG CONGRESS, KUALA LUMPUR, MALAYSIA, 15-21 JUNE 2014
June, Kuala Lumpur, Malaysia

Climate change is a fact...

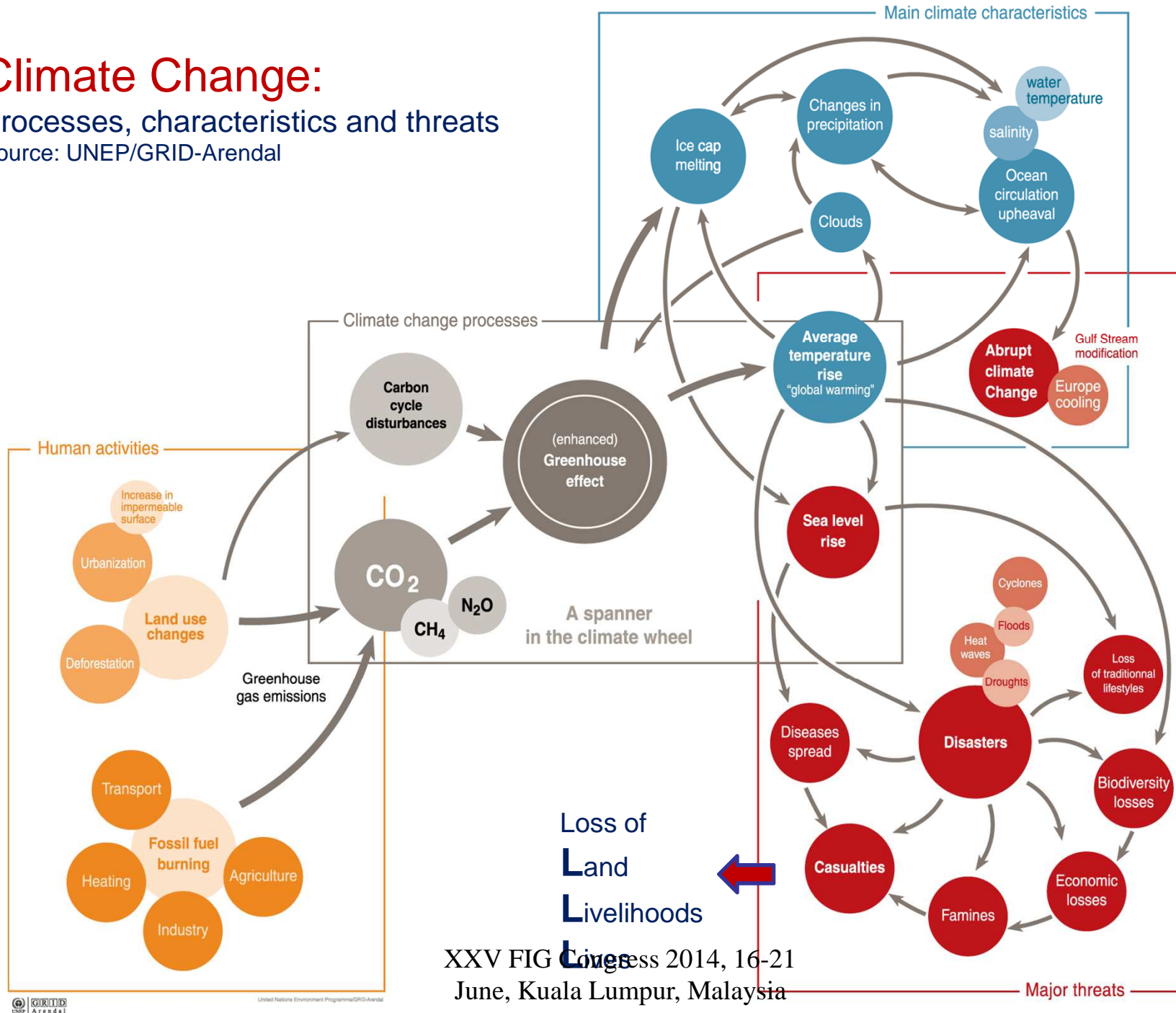


- Climate change is a fact
- The global scientific community has a clear consensus view that the earth's climate is being impacted by human influence such as the burning of fossil fuels, land clearing, and increasing urbanisation.
- The impact of global warming relates to sea level rise, flooding, draught, environmental degradation, etc. Climate change leads to loss of land, livelihoods, and lives.
- Climate change will affect the basic elements of life for people round the world – access to water, food production, health and the environment.
- Climate change leads to loss of land, livelihoods, and lives.

Climate Change:

Processes, characteristics and threats

Source: UNEP/GRID-Arendal



XXV FIG 1. UNEP/GRID-Arendal 2014, 16-21
June, Kuala Lumpur, Malaysia

Stating the Climate Change Challenge



“Climate change is the defining challenge of our time”

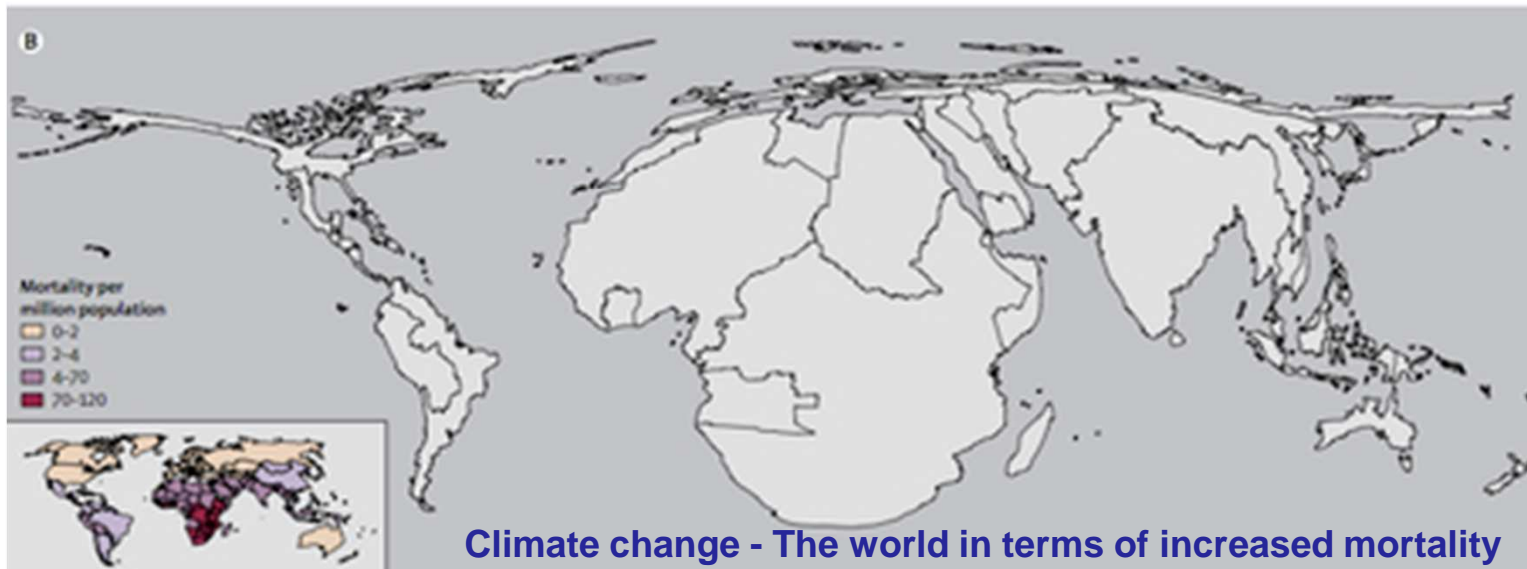
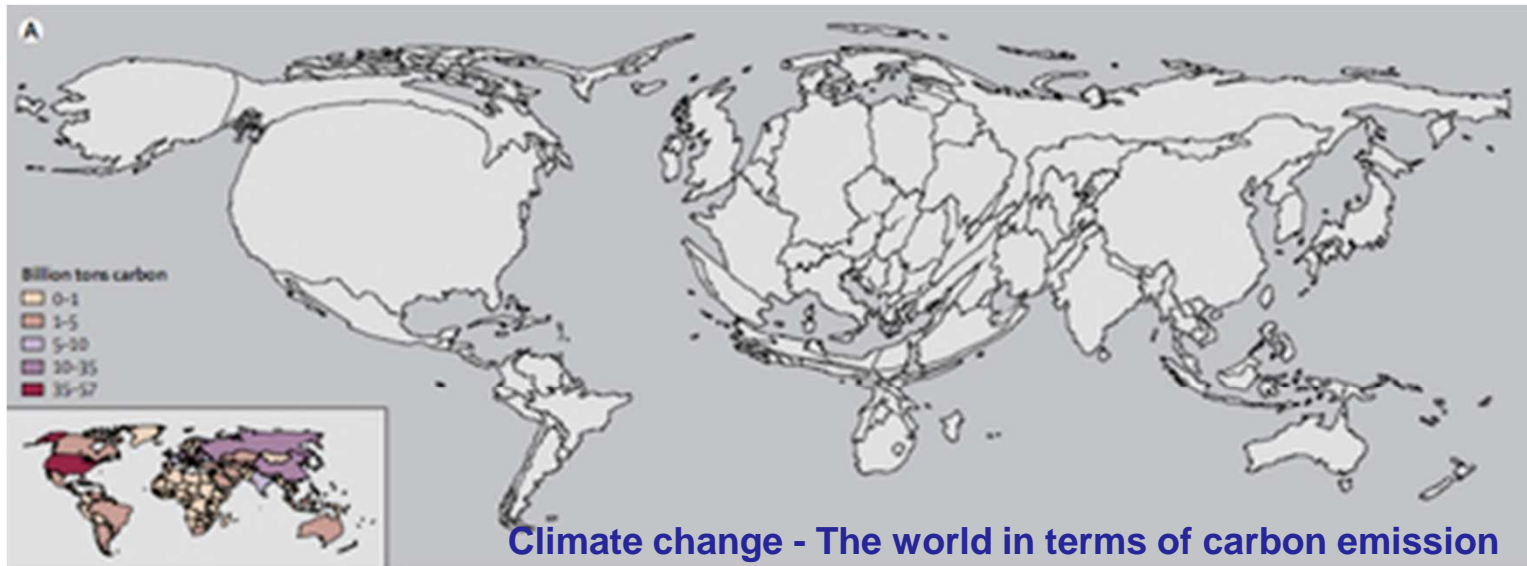
Combining the impacts of climate change with the current global financial crisis we risk that all the efforts to meet the MDGs will be rolled back.

Those that contributed the least to this planetary problem continue to be disproportionately at risk.

Ban Ki-moon, SG, United Nations, 2009

XXV FIG Congress 2014, 16-21
June, Kuala Lumpur, Malaysia

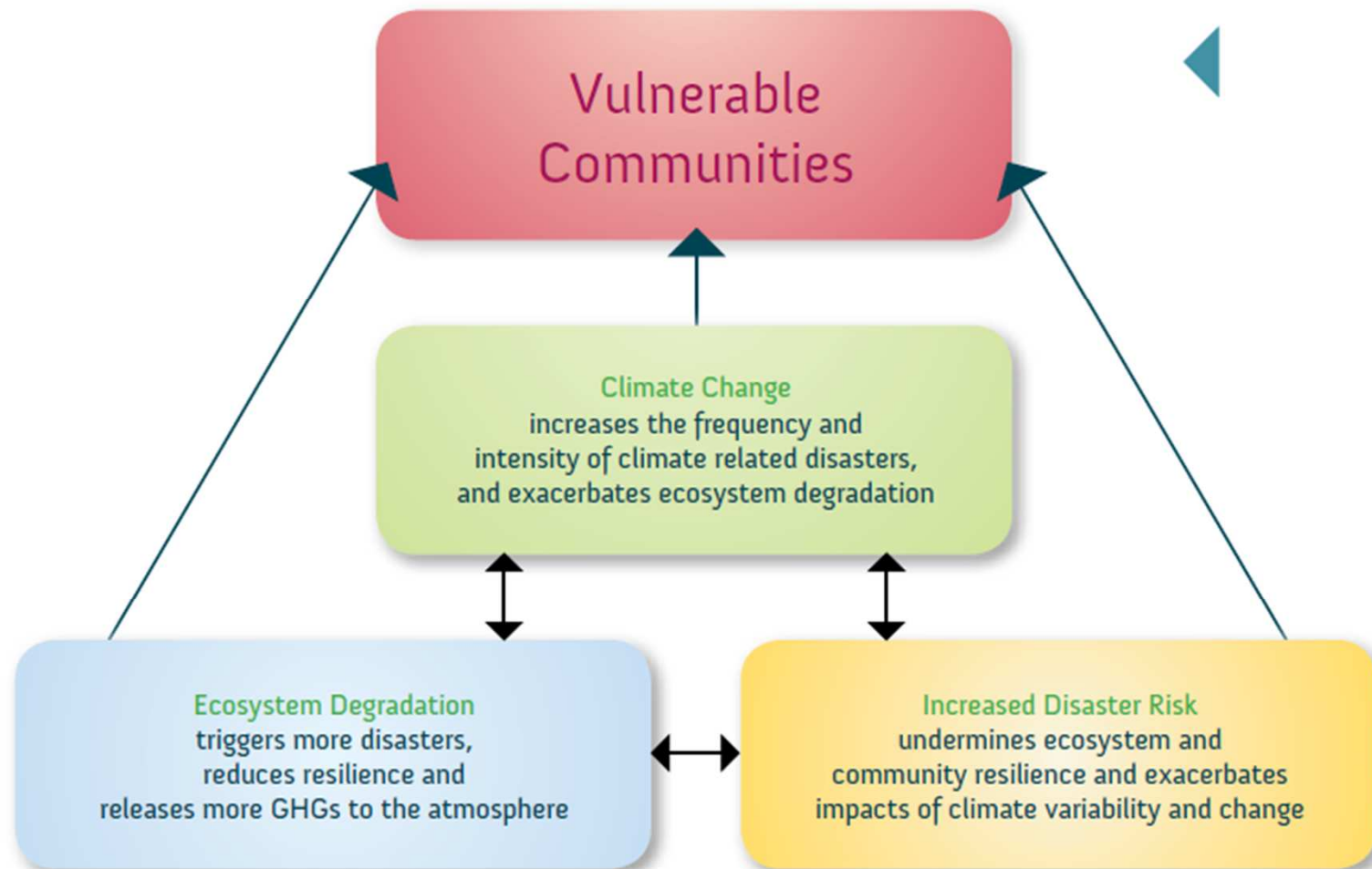
Global/Regional Perspectives



XXV FIG Congress 2014, 16-21.
June, Kuala Lumpur, Malaysia

Loss of healthy life years is predicted to be 500 times greater in the African region than in Europe

Local Level Impact of Climate Change



The interaction between climate change, ecosystem degradation and disaster risk, UNEP, 2009
UNEP Congress 2009, 6-21
June, Kuala Lumpur, Malaysia

Facing the Climate Change Challenge



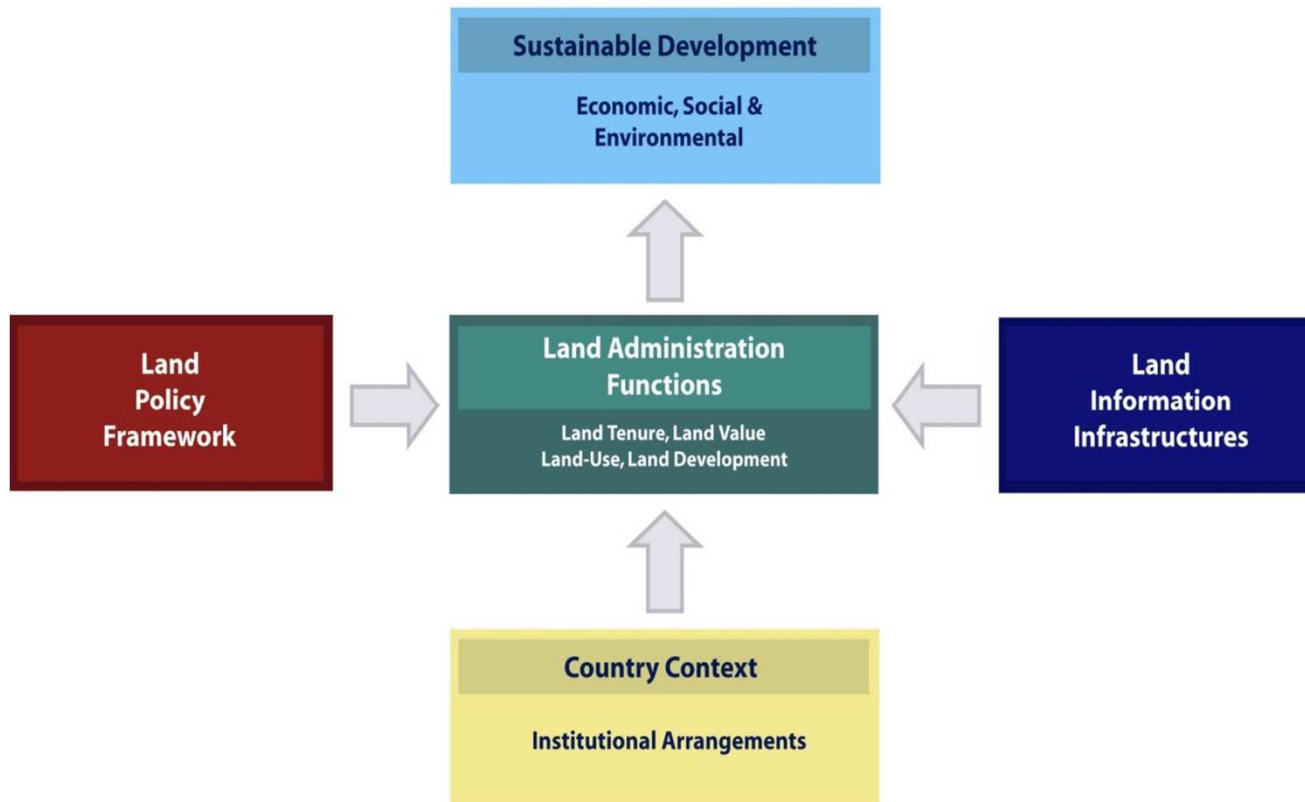
“Climate change also provides a range of opportunities”

Prevention of climate change can be greatly enhanced through better land-use planning and building codes so that cities keep their ecological footprints to a minimum and make sure that their residents, especially the poorest, are protected as best as possible against disaster.

Anna Tibaijuka, Past ED, UN-Habitat, 2009

XXV FIG Congress 2014, 16-21
June, Kuala Lumpur, Malaysia

Land Governance



Land governance is about the policies, processes and institutions by which land, property and natural resources are managed.

This includes decisions on access to land; land rights; land use; land development.

Land governance is about determining & implementing sustainable land policies.

The land management paradigm

Land Governance and Climate Change

Sustainable **Land Administration Systems** should serve as a basis for climate change mitigation and adaptation as well as prevention and management of natural disasters.

Incorporating climate change into current land policies

Adopting standards for energy use, emissions, carbon stock potential,...

Identifying prone areas (sea level rise, drought, flooding, fires,...)

Controlling the use of land in relation to climate change and disaster risks

Introducing carbon footprint assessment in relation to land use developments

Controlling building standards and emissions in relation to climate change

Improving resilience of existing ecosystems vulnerable to climate change

The Role of Land Professionals

- Designing and monitoring earth observation systems related to climate change
- Building data modelling systems for managing spatial data related to climate change
- Incorporating climate change measures into current land policies and regulations
- Devising and managing land governance systems using good governance and climate proof principles
- Advocating and leading policy discussions with politicians, NGO's and civil society.



Building Global Partnerships

FIG is committed to helping UN agencies such as UN-FAO and UN-Habitat, and the World Bank influence the global agenda in relation to the climate change challenge and designing measures for appropriate action.

UN- FAO, UN-HABITAT

Identifying land ownership and land use in disaster situations - the emergency relief phase.

- emergency shelter
- protection of displaced persons
- restoration of livelihoods,
- reestablishing the situation of legal land rights

World Bank

Building land administration systems for managing potential disaster risks and adaptation measures related to the climate change challenge

- sea level rise,
- flooding,
- draught,
- hurricanes, etc.



XXV FIG Congress 2014, 16-21
June, Kuala Lumpur, Malaysia

Key Message

- The surveyors' multidisciplinary profile is essential for dealing with the complexity of the climate change challenge.
- Surveyors are custodians of enabling technologies for monitoring environmental change and should take a leading role in explaining to the wider public what climate change is all about.
- Surveyors are experts in land administration and management, and should also take a leading role in addressing the climate change challenge in the wider context of sustainable land governance.



“Development needs to be climate ready, even if it cannot be climate proof”

June, Kuala Lumpur, Malaysia

The Economist, The World 2011.



XXV FIG Congress 2014, 16-21
June, Kuala Lumpur, Malaysia

**Thank you
for your attention**