

# What next for Climate Change & People?



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# Outline



- Juxtaposing Sustainable Development & Climate Change
- In the interest of Humankind!
- Life in 3D
- Politics, Power and People

# Juxtaposing Sustainable Development and Climate Change



**WHY IS CLIMATE CHANGE APPARENTLY SO DIFFICULT  
TO SOLVE?**



# Scholarly arguments



- "Most of the observed increase in globally-averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations. It is likely there has been significant anthropogenic warming over the past 50 years averaged over each continent (except Antarctica). IPCC 4th Assessment Report, Climate Change 2007
- ....., the latest estimates by the IPCC suggest that, for the world as a whole, the harmful effects over the next 50 years or more will barely—if at all—offset the benefits.— Bekerman W., 2002
- Sustained economic growth is key to improved environment management – Goldin, I. (EBRD)
- Climate change is the greatest and widest-ranging market failure ever seen. The benefits of strong, early action considerably outweigh the costs.— Stern N. (2006)



# The political argument



- ‘Respect for the environment doesn’t go against economic growth aspirations’ Sarkozy 2008
- There may still be disputes about exactly how much we're contributing to the warming of the earth's atmosphere and how much is naturally occurring, but what we can be scientifically certain of is that our continued use of fossil fuels is pushing us to a point of no return. Obama.
- "It's a matter of survival for us. If our islands go under, we all go under," said President Anote Tong of Kiribati
- "We view associated problems of high frequency of abnormal climate, sea level rise, global warming and coastal degradation as matters affecting the economic and environmental security of all small island states," Timothy Harris, foreign minister of the Caribbean



# The joe blog argument



- ‘It’s snowing like crazy in my garden, who is saying there is global warming?’ Blogger
- ‘It’s a scheme to get more tax payer money’ an average US worker.
- ‘God is in charge and he will never let this happen’ Elderly pacific islander.
- ‘It’s too far away you are talking 2100 – I would not even be there.’ my next door neighbour



# The ICARUS Effect



- One root cause lies in the fact that present day modern economics/policies does not adequately convey these externalities;
- Multidisciplinary and integrated approaches are still uncommon and often too complex;
- Many politicians seem to understand the links but remain unsure as to the solutions
- Public myopia seems to be linked to social awakening
- Failure to drive technological innovation and markets through development

# In the Interest of Humankind!



**DOES PRESENT DAY ECONOMIC/POLICY SYSTEMS  
ADEQUATELY COVER 'EXTERNALITIES' ?**

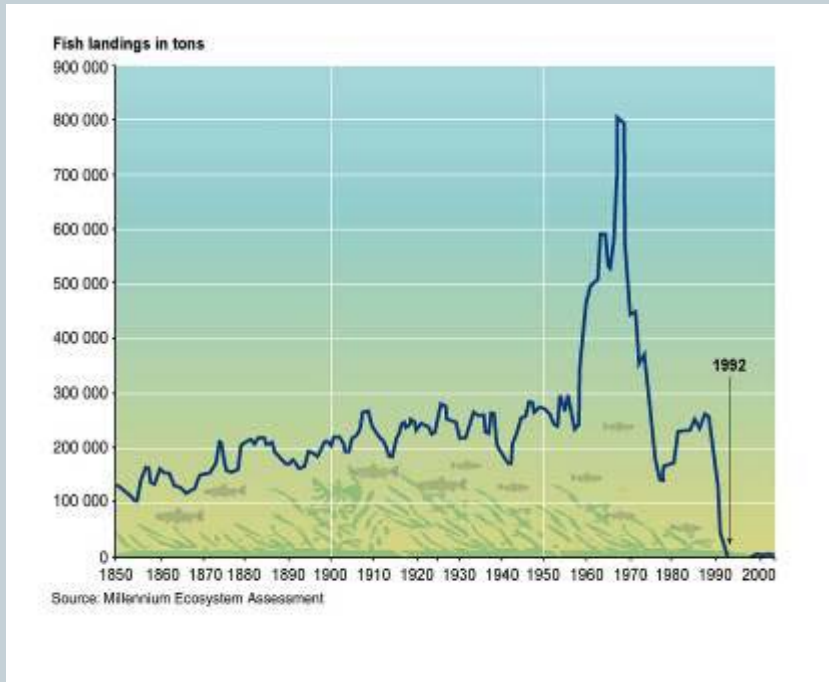
Quote by Ted Turner, billionaire, founder of CNN and major UN donor: "A total population of 250-300 million people, a 95% decline from present levels, would be ideal."





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# Stimulating economic growth....



- TEV associated with sustainable management > conversion
- However conversion still proceeds as private economic benefits are greater.
- ‘External’ cost of UK agriculture was \$2.6 billion
- 1992 collapse of NA cod fishery cost \$2 billion in income support/re-skilling

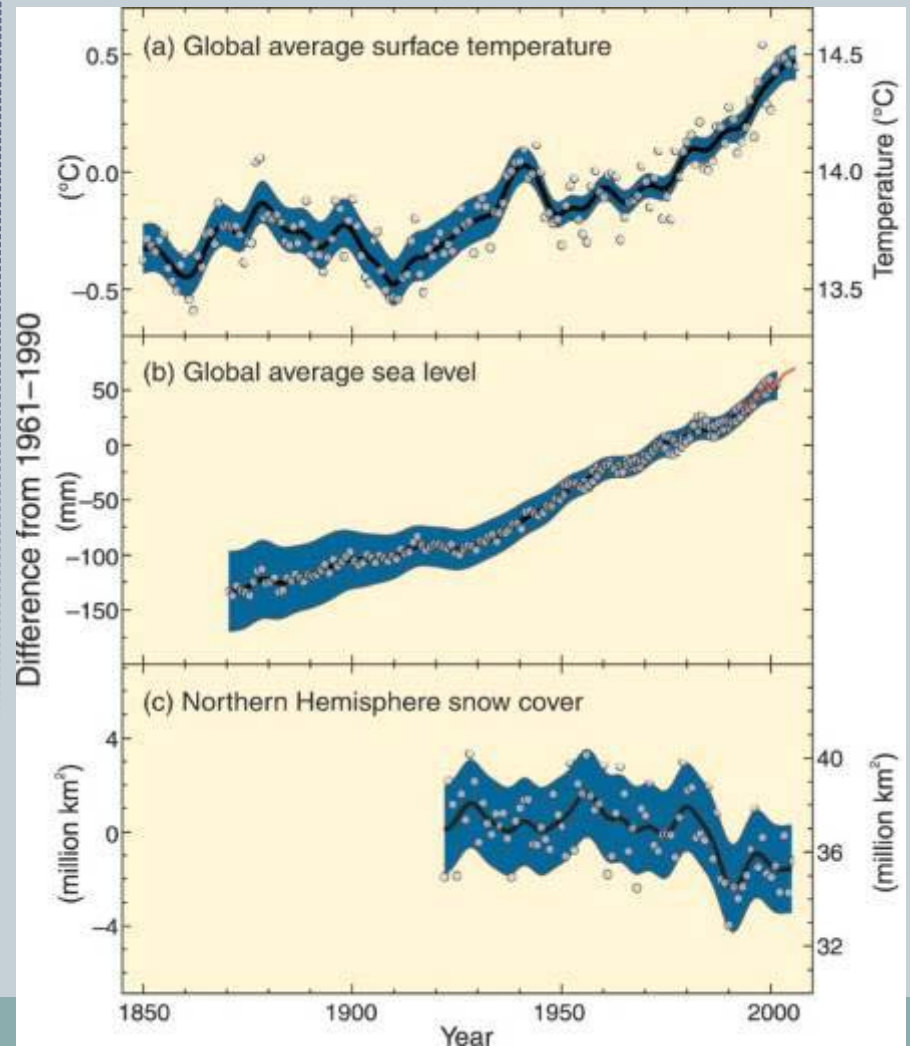
# Life in 3D



**HOW DO WE MOVE AWAY FROM SILOS?**

# The Earth Dimension

- Long-term observations
- Changes across temporal & spatial scales
- Modelling changes
- Driving forces and factors of change
- Uncertainties
- Searching for signals

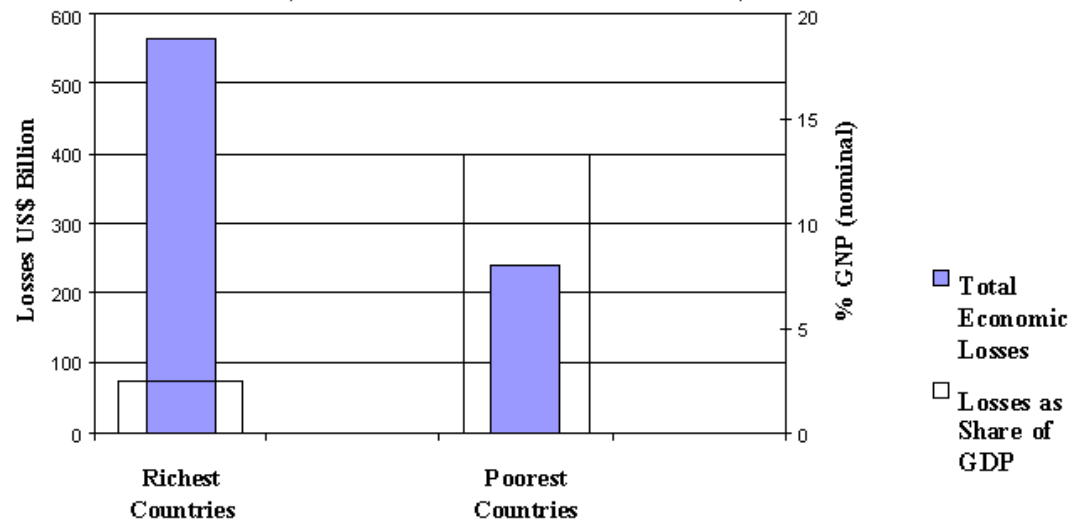


# The Human Dimension

## Piquet 2008 (UNHCR)

- Combination of policy and economic failures rather than just natural forces
- Receiving states feel responsible to recognise political but not non-political refugees
- Hurricane Katrina - thousands evacuated but thousands remained trapped
- >140 million affected by flooding, with high propensity for return
- >146 million affected by drought
- SLR the largest potential for migrations – 602 million people
- Policy intervention interventions will partly address the issue

Disaster Losses, Total and as Share of GDP, 1985-99

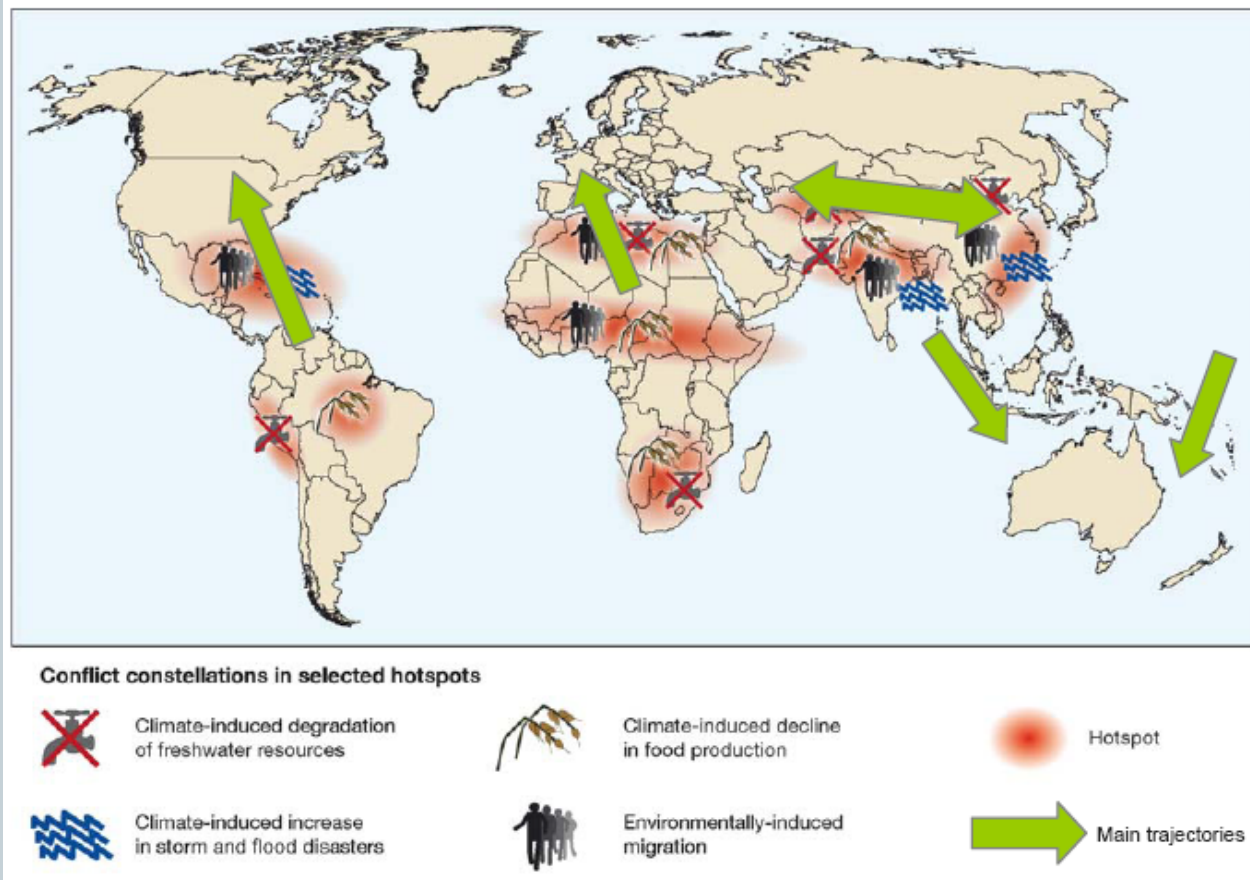


Source: UNDP, 2002



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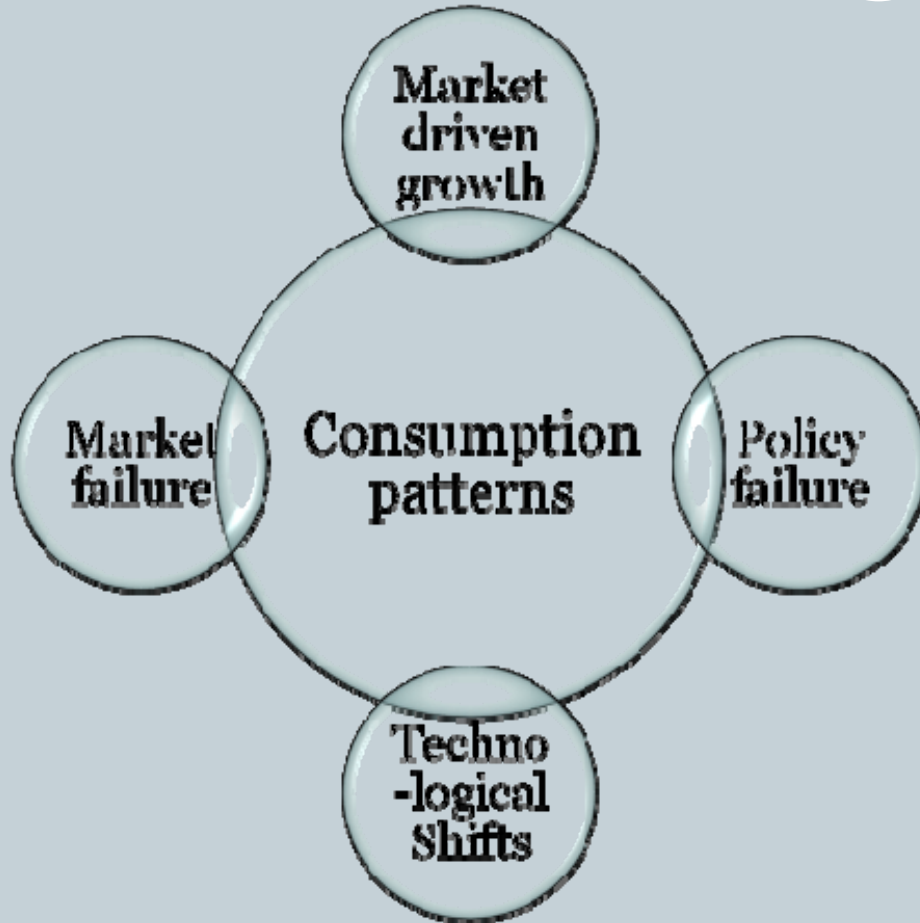
# Cause-Effect



Global map conflict and migration induced by environmental stressors (Source: WBGU, 2008)



# The Development Dimension



- Market failure: Richest 20% consumes 86% of all goods and services used and use 58% of energy produced;
- Technological shifts - Growth of the global consumer class – 1.7 billion people.
- Market driven-growth : Harnessing the power of global advertising - from \$257 billion in 1990 to \$446 billion in 2000;
- Policy Failure - Food waste in the US amounts to \$75 billion

Source: UNFPA, UNDP, USDA

# Politics, Power & People



**ADDRESSING CLIMATE CHANGE?**



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# Address to Development Priorities



To Sustain global economic growth

- Shift to low-carbon energy economy
- Implement adaptation measures
- Address poverty
- Address trade distortions

To Restore and Enhance Natural Capital

- Halt Forest Degradation
- Restore resilient ecosystems
- Protect existing natural capital
- Address social equity and basic rights





# Green Power



- Shifting the world onto a low-carbon path could eventually benefit the economy by \$2.5 trillion a year. (Stern, 2006)
- Unabated climate change could cost the world at least 5% of GDP each year; if more dramatic predictions come to pass, the cost could be more than 20% of GDP.
- By 2050, markets for low-carbon technologies could be worth at least \$500bn.



# Déjà Vu



- Disproportionate Wealth creation : Schemes which further enrich the rich and impoverish the poor – e.g. unfair IPR deals.
- Improper reflection of externalities in policy: Schemes which cause further environmental damage – some biofuel subsidy schemes.
- Green jobs which generates more unsustainable consumption.
- Taxes regimes causing welfare losses in the south – unfair long-haul tax on airlines
- Carbon trading – schemes which shift the opportunity cost burden to developing countries – some voluntary carbon schemes



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The Sea Level Rise Foundation aims to:

Educate

Engage

Empower

Enable

# Educate



- Awareness of Sea Level Rise and its impacts
- Capacity building across all sectors
- Strengthen University, technology and knowledge networking and exchange
- School Programmes
- Community-based programmes
- Risk Reduction Awareness Activities
- Knowledge-base on Adaptation to Sea Level Rise

Thank You

