



Institute of
Development Studies

**Adaptation as a
development issue**

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2009

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CLIMATE CHANGE
Global Warming
GreenHouse Emmissio



But first some linking points to other papers..

- **The need for adaptation arises because of the development pathways which led to industrialisation of the north resulting in increased carbon dioxide concentrations.**
- **The extent of the need for adaptation in all countries will be determined by future development pathways, and the extent to which low carbon pathways can/will be pursued.**
- **Commitments of finance and technology (from Rio, KP) for both adaptation and mitigation pathways for developing countries, have not been met by Annex 1 parties, these are crucial to a post 2012 deal.**
- **Developed countries' Governments have concerns about how they generate the necessary funds from public finance sources, especially in wake of the financial crisis, and with the need to embark on low carbon pathways- so this is also a future development issue for them.**

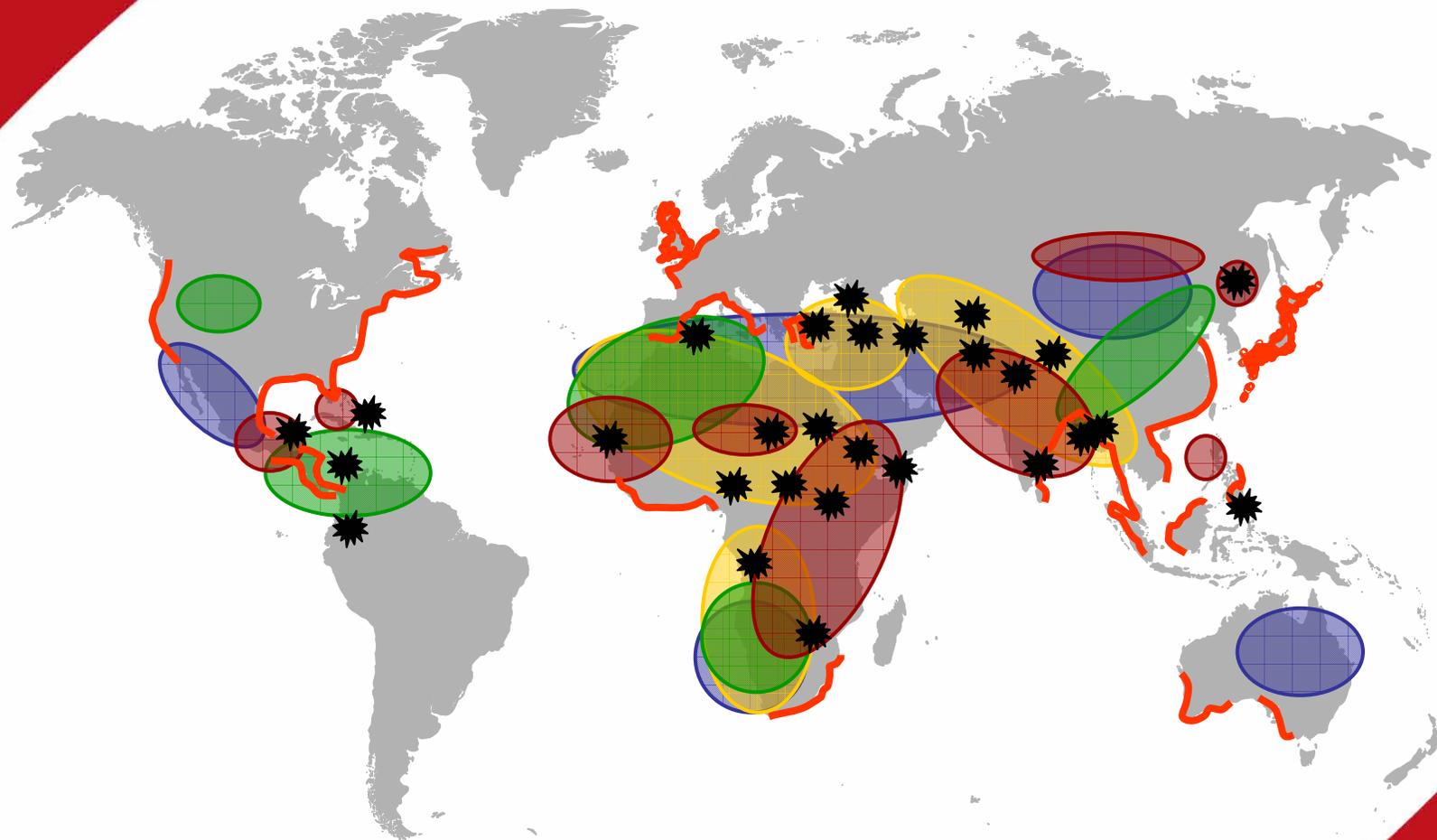
Linking points..

- The impacts of climate change are only one factor affecting development outcomes and the development pathway pursued will affect the extent and vulnerability to climate change.
- If low carbon pathways are adopted to reach low levels of ghg stabilisation (400- 450ppm), these will frame fundamental dimensions of various economic sectors: housing, utility provision (water services), industrial systems etc so that reducing vulnerability to climate change –adaptation- will also need to co-develop through sustainable development approaches.
- Also social and political systems will need to change for low carbon development and to obtain acceptance and implement sustainable development.
- But **really very little work** has been done on how and what these economic , social and political system changes will be and how they can take shape.

Outline: Adaptation as a development issue

- If so, does that reframe climate change adaptation?
Is adaptation as a climate change issue different?
- What are the adaptation and development interfaces?

A Multiplier for Instability



Water Scarcity



Demography



Crop Decline



Hunger



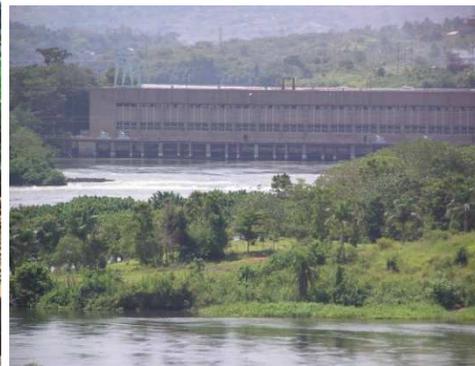
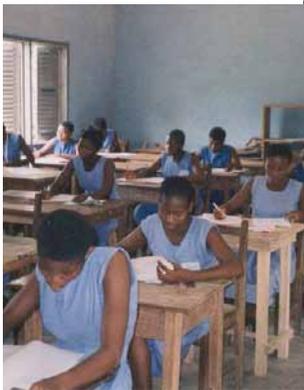
Coastal Risks



Recent Conflicts

If adaptation is a development issue- does that reframe climate change adaptation (CCA)?

- It changes the timescales for CCA. Not a distant potential issue to motivate mitigation but an immediate development issue now. Developing country governments have strategically recognised that at a strategic level. Stern, UNDP, Swedish Commission.
- DRR, land, agriculture, forestry and water development professionals increasingly engaging.
- The need for greater clarity about what CCA is about is evident.



CCA and Development have different foci

- Development (ODA) is poverty focused, about vulnerable groups of people
- CCA (UNFCCC) focuses on countries and ecosystems most vulnerable to CC
- Timescales have been different, CCA often has to function multi-scale, multi-organisation
- And different reasons for funding : legally required pollution compensation vs donations

UNFCCC TEXT

- ***“ The ultimate objective is to achieve...stabilisation of ghgs in the atmosphere at a level that would prevnt dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”***

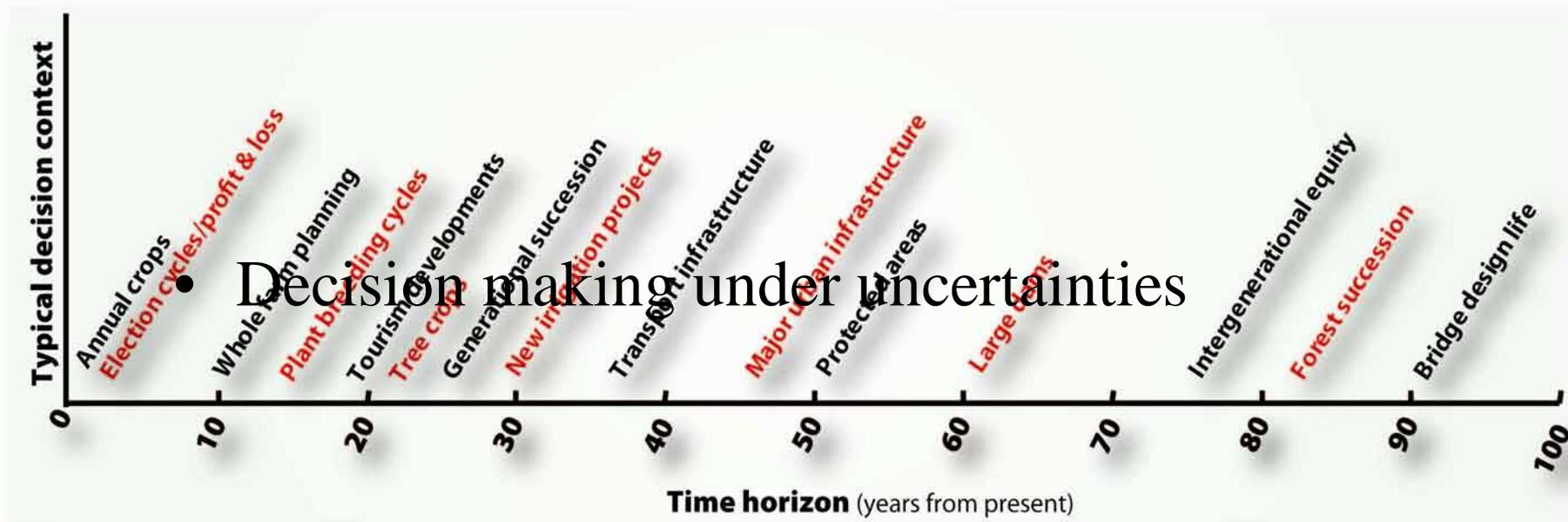
Special access to funding, insurance and tech transfer for countries with :

- ***Small island countries,***
- ***Low-lying coastal areas***
- ***Prone to natural disasters***
- ***LIABLE to drought and desertification***
- ***High atmospheric pollution***
- ***Fragile ecosystems eg mountains***
- ***Fossil fuel-dependent economies***
- ***Land-locked and transit countries***

People??

1.

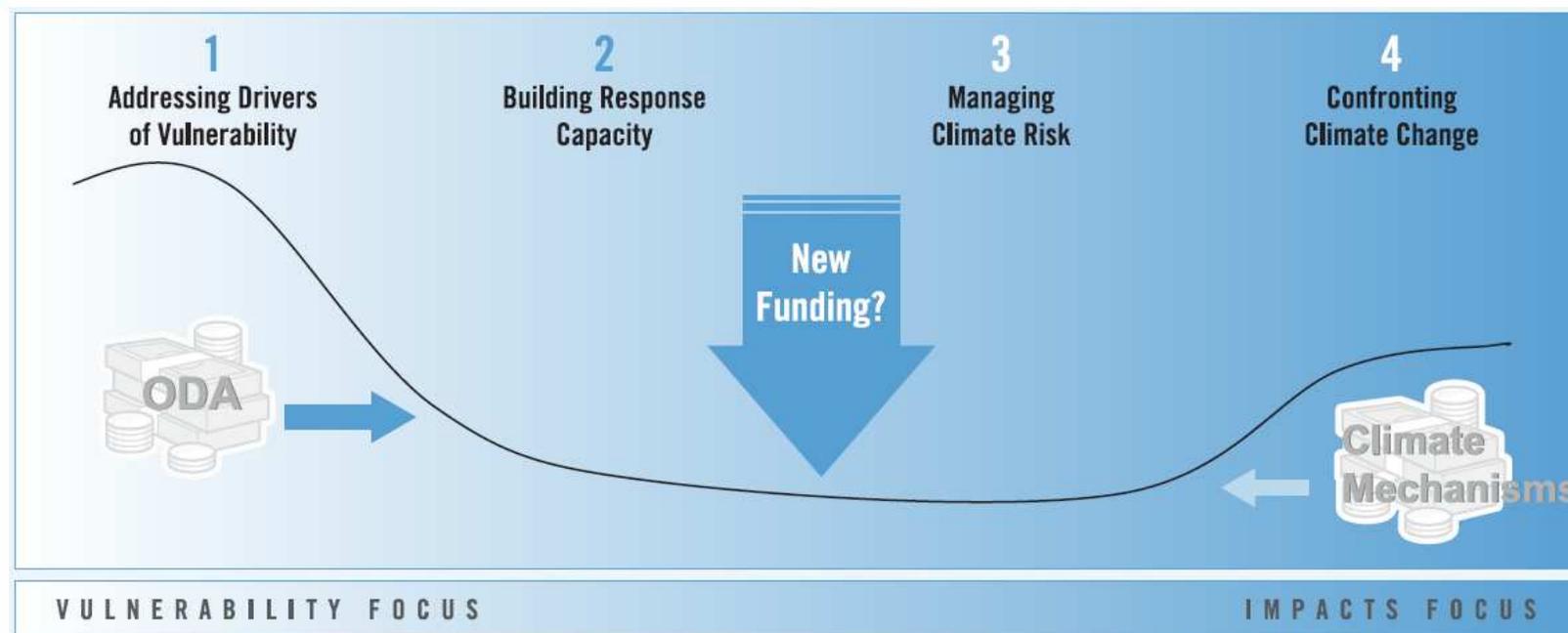
Adaptation features and timescale



What is the adaptation and development interface?- what is the add-on for CC?

- It's not been clear-- climate change can be linked with 7 MDGs but doesn't have its own
- It's quite difficult to distinguish the two in relation to action on the ground
- Viewed differently by national governments and north and south

Development and Adaptation



World Resources Institute (2007) "Weathering the storm: Options for framing adaptation and development"

Millennium Development Goals Examples of links with climate change

Eradicate extreme poverty and hunger (**Goal 1**)

Climate change is projected to reduce the assets and livelihoods of many poor people, for example, health, access to water, homes, and infrastructure.

Climate change is expected to alter the path and rate of economic growth due to changes in natural systems and resources, infrastructure, and labour productivity. A reduction in economic growth directly affects poverty through reduced income opportunities.

Climate change is projected to alter regional food security..

Ensure environmental sustainability (**Goal 7**)

Climate change is likely to alter the quality and productivity of natural resources and ecosystems, some of which may be irreversibly damaged, and these changes may also decrease biological diversity and compound existing environmental degradation

CLIMATE CHANGE ADAPTATION INTERVENTIONS AND THE MDGS

Changing natural resource management practices

- Emphasizes new or different natural resource management practices (e.g., for managing water, land, protected areas, fisheries) as adaptation strategies.
- Goal 7: Ensuring Environmental sustainability
- Goal 7; Target 9: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
- Goal 7; Target 10: Reduce by half the proportion of people without sustainable access to safe drinking water
- Goal 1: Eradicate extreme poverty and hunger

Building institutions

- Creates new or strengthens existing institutions (e.g., establishing committees, identifying mechanisms for sharing information across institutional boundaries, training staff responsible for policy development).
- Goal 7; Target 9: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
- Goal 7; Target 11: Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020
- Goal 8: Develop a global partnership for development
- Goal 8; Target 13: Address the special needs of the least developed countries

Synergy on the ground

Livelihood resources	Examples of adaptive capacity
Human	Knowledge of climate risks, conservation agriculture skills
Social	Women's savings and loans groups, farmer-based organizations
Physical	Irrigation infrastructure, seed and grain storage facilities
Natural	Reliable water source, productive land
Financial	Micro-insurance, diversified income sources
Policies, institutions and power structures	

So adaptation to CC is about...

- **Current**: Addressing today's vulnerabilities and threats to human dev't
- **Future**: Preparing for tomorrow's threats
- **Old**: Building on what already works
- **New**: Using new information, technology



**Action is constrained by lack of funding and
the splits on the mechanisms**

Developing countries views on adaptation and development

- Equity and justice issues about damage of climate change to vulnerable countries due to emissions from “rich” developed countries are a primary concern.
- Developed countries must deliver on their obligations under the Convention on finance, technology and capacity building.
- Funding for adaptation should cover the additional costs of climate change and existing ODA commitments should not be diverted **(also, no new conditionalities should be added to ODA).**
- Governance of financial mechanisms should transparent, include an equitable and balanced representation by all Parties, and operate under the authority of the CMP. It should provide “direct access” to funding and ensure that recipient countries are involved during all stages. “Predictable” sources of funding are needed, not just more funding.
- Support should be provided through the UNFCCC instruments rather than through fragmented efforts outside these instruments.
- New institutional arrangements should be created, such as an adaptation committee or an expert body like the one covering technology transfer (EGTT) within the Convention

Developed countries views

- The need to meet obligations and provide financial assistance to cover costs of impacts caused by historically accumulated greenhouse gas stocks is generally accepted.
- Issues relating to potential climate change impacts are often linked to engaging developing countries more directly on mitigation.
- The financial mechanism should deliver effectively for their taxpayers. Private finance is also needed.
- Overseas Development Assistance (ODA) should integrate climate change into its activities.
- There should be no proliferation of new funds under the Convention.
- There should be minimum conditions for accessing funding

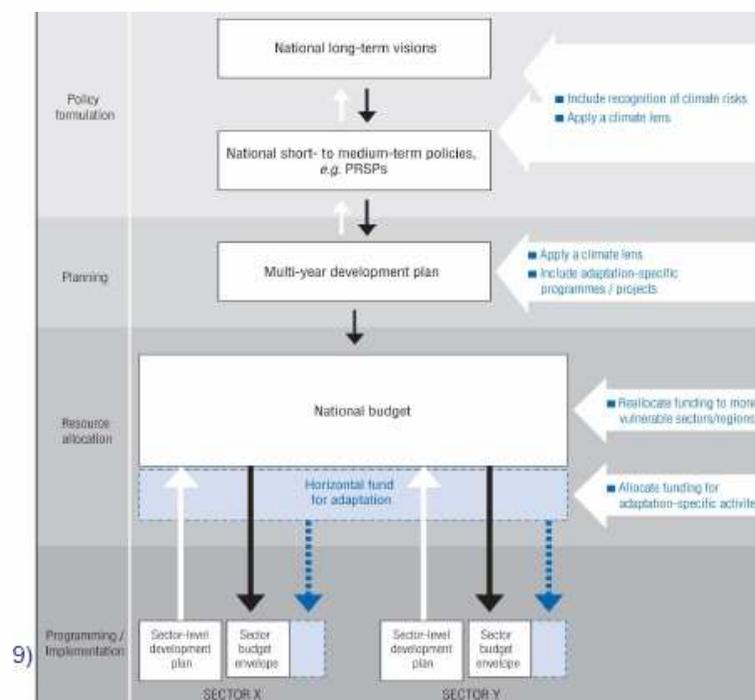
Common concerns

- The need for a methodological shift from climate change impacts studies to increased understanding of how to make adaptation happen
- How to examine adaptation needs and identify priorities
- The relative roles of adaptation and mitigation actions
- The lack of clarity on the relationship between climate change adaptation measures and the mainstream of development, particularly in relation to financial assistance
- What institutions and funding mechanisms are used for delivery at international and national level.

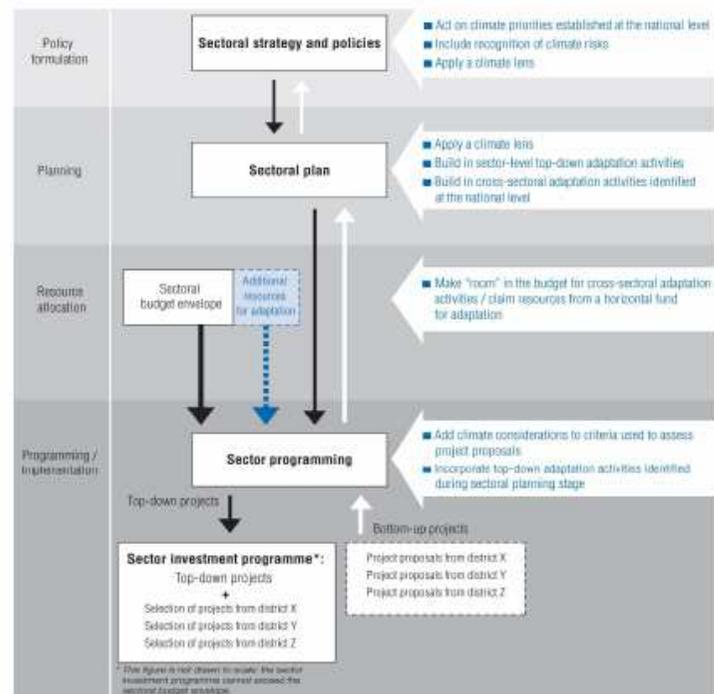
Developed countries

- Are promoting use of the Paris Principles on aid effectiveness as providing lessons for CCA delivery (despite the fact that they aren't applying them very effectively)
- Actively mainstreaming CC into their development portfolios, applying various screening tools
- E.g OECD Guidance on Integrating CCA into Development Cooperation

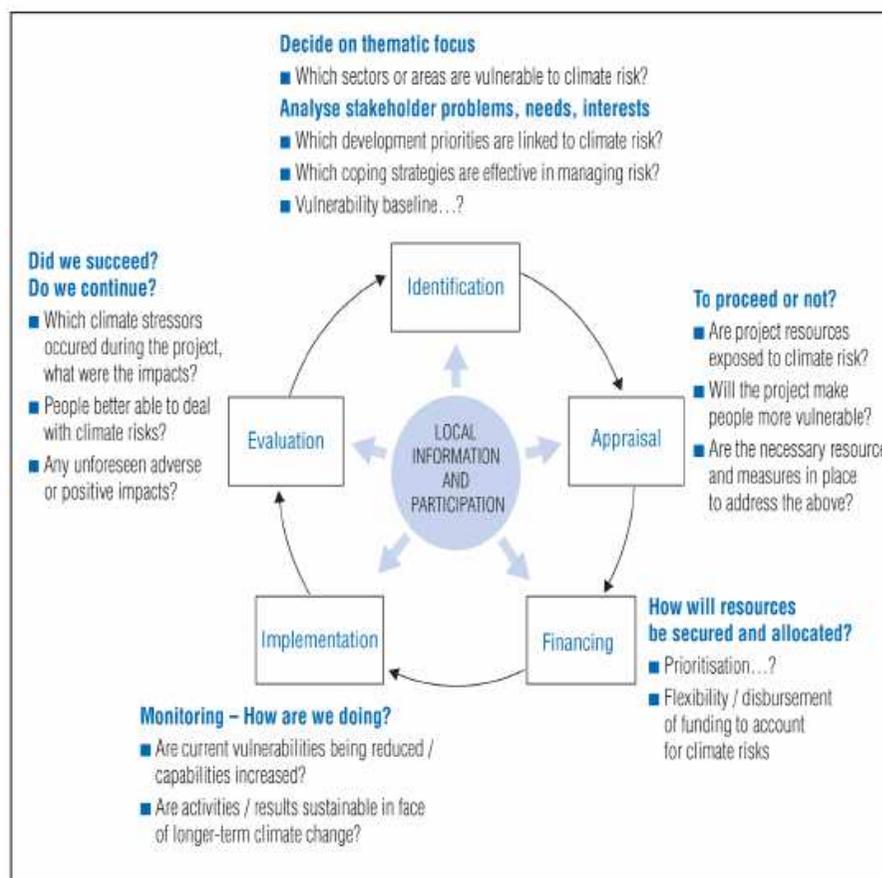
OECD national level planning



OECD sectoral level planning



OECD Guidance



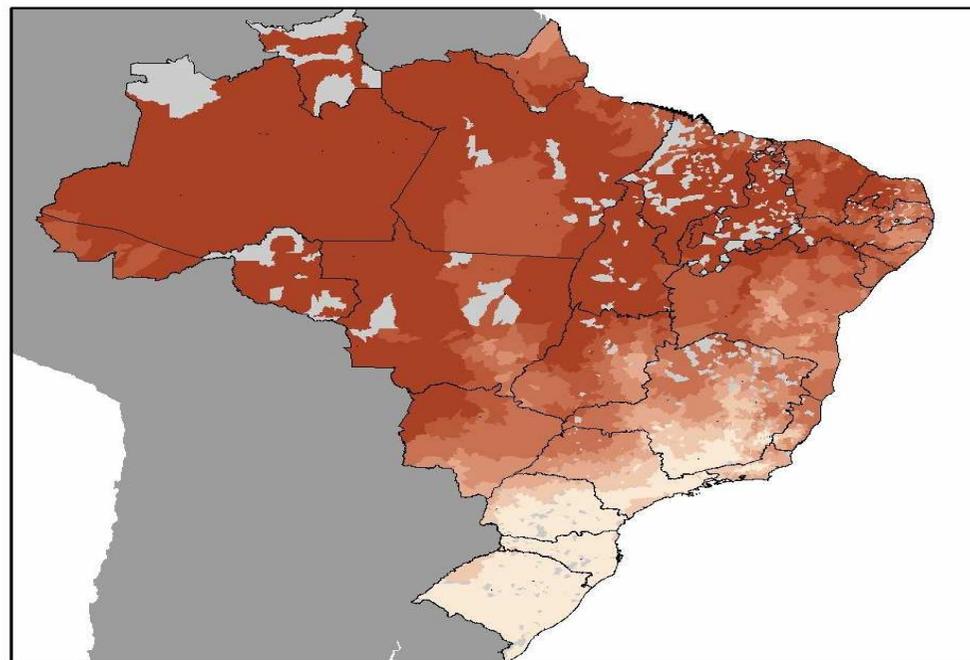
But

- Many countries are not yet adapted to climate variability, weak governance systems and limited institutional resources
- And need to deal with the Adaptation Deficit – the additional effort needed to manage the impact of climate change to make up for the failures in managing existing climate variability

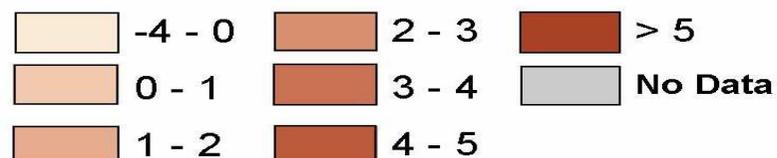
Two case studies on water and CC: NE Brazil and Niger

- Examined integration of CC into water resources management
- Both reknowned drought-prone areas of the world
- Studies showed the gaps on scientific understanding, and the policy shifts required to meet CC challenges for the poor and vulnerable

The facts- Poverty will increase in some regions



Effects of climate change on poverty (p.p.)



Source: Assuncao, J. J., and F. F. Cheres. 2008. *Climate Change, Agricultural Productivity and Poverty*. Washington, DC: World Bank

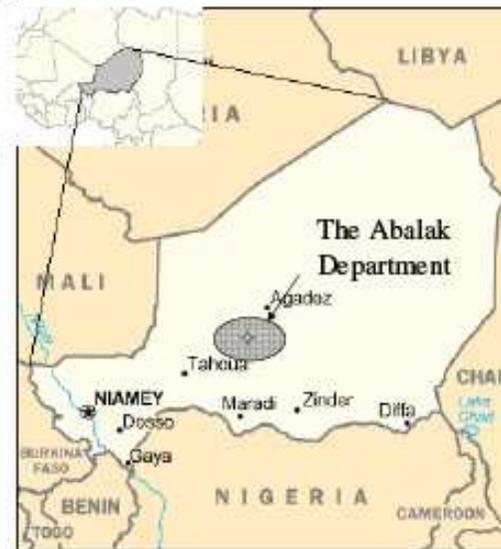
The case-study region

Primary Research conducted in:

- Abalak Department, Tahoua Region, Republic of Niger

This area is characterized by:

- Ongoing Desiccation
- Frequent periods of drought



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Critical results: NE Brazil and Niger

- Recent droughts not necessarily due to CC, (not outside historical climate variability) but temp change and rainfall pattern changes. Scientific uncertainty- due to lack of knowledge of North Atlantic SST patterns which affected both regions.
- Some expert CC science in the countries not getting down to local level
- Water management not been geared to needs of the off-grid small holders/ pastoralists- on edge of coping- no reserves. Mega reservoir/irrigation bias.

Results.....

- CC was not being integrated into water sector plans- these were still focused on gaps in provision due to climate variability
- Donors in Niger were only just beginning on coordination- on water sector- not considering CC
- CC isolated as a project based activity (Niger)
- CC isolated as a Federal Government issue (Brazil)
- Social protection provided funds for people to buy water at times of drought (Brazil)

Issues

- Desiccation is causing the disappearance of water rich species of grass and trees.
- This is causing a drop in animal production.
- The lack of milk has caused a shift to cereal as a staple food.
- Families now consume 4 or 5 times as much grain as in the past.



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Adaptation as a development issue

- Brings into focus adaptation strategies needed for the poor and vulnerable. Development efforts have not been successful here so far either.
- Political impasse on funding may mean CCA does not learn from lessons of development- it gets institutionalised separately and run by a different set of professionals. It may get overcomplicated.
- Solution- use innovative funding for UNFCCC adaptation and then integrate these with development funding within countries (Huq).