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# Enhancing Regional & National Capacity to Address Climate Change

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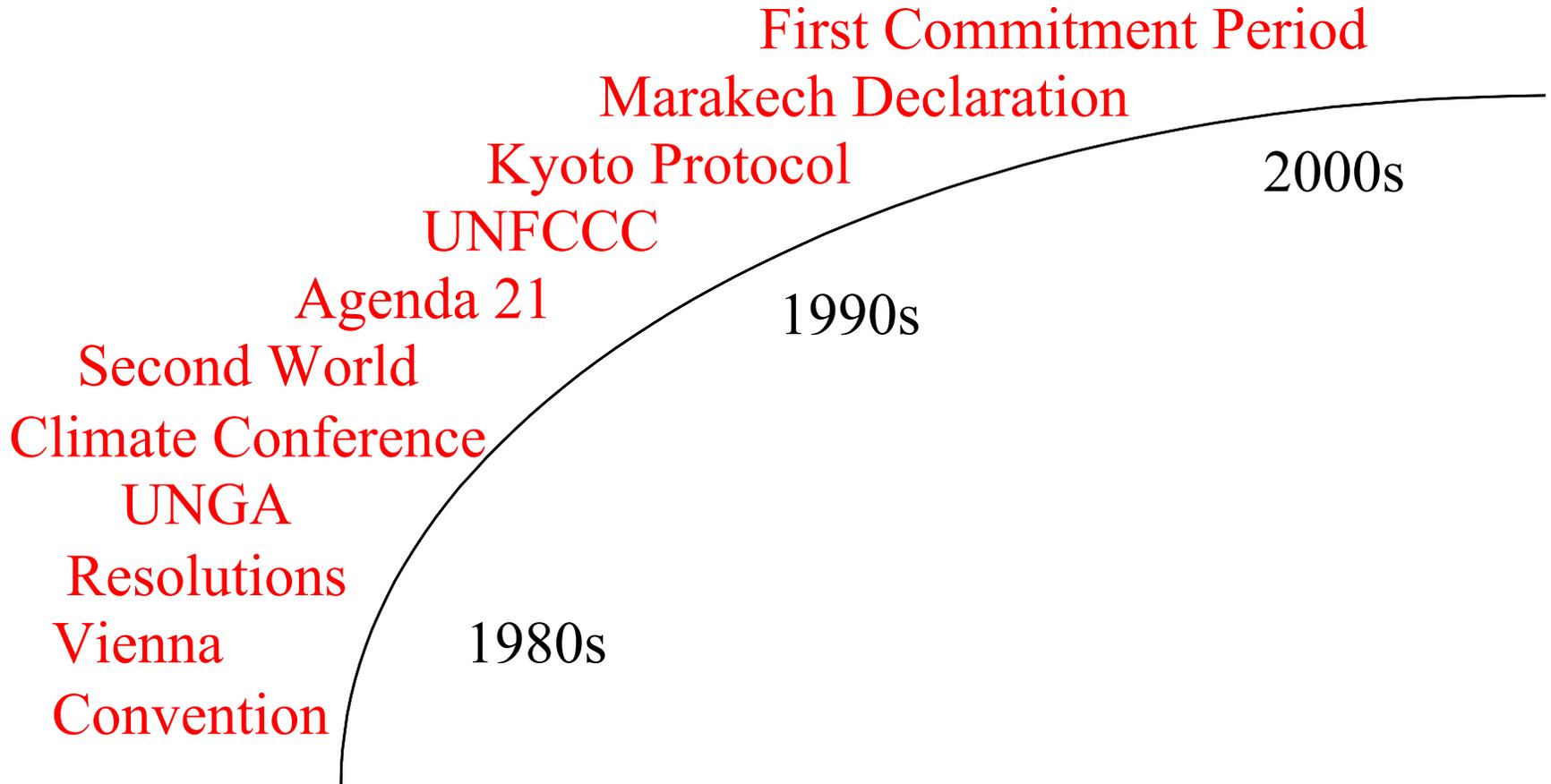
New Zealand



# Outline of Presentation

- Historical perspective on capacity enhancement
  - Success stories
  - Lessons learned
  - Continuing and emerging needs and challenges
  - Some examples
  - Conclusions and Recommendations
- From a developing country perspective*

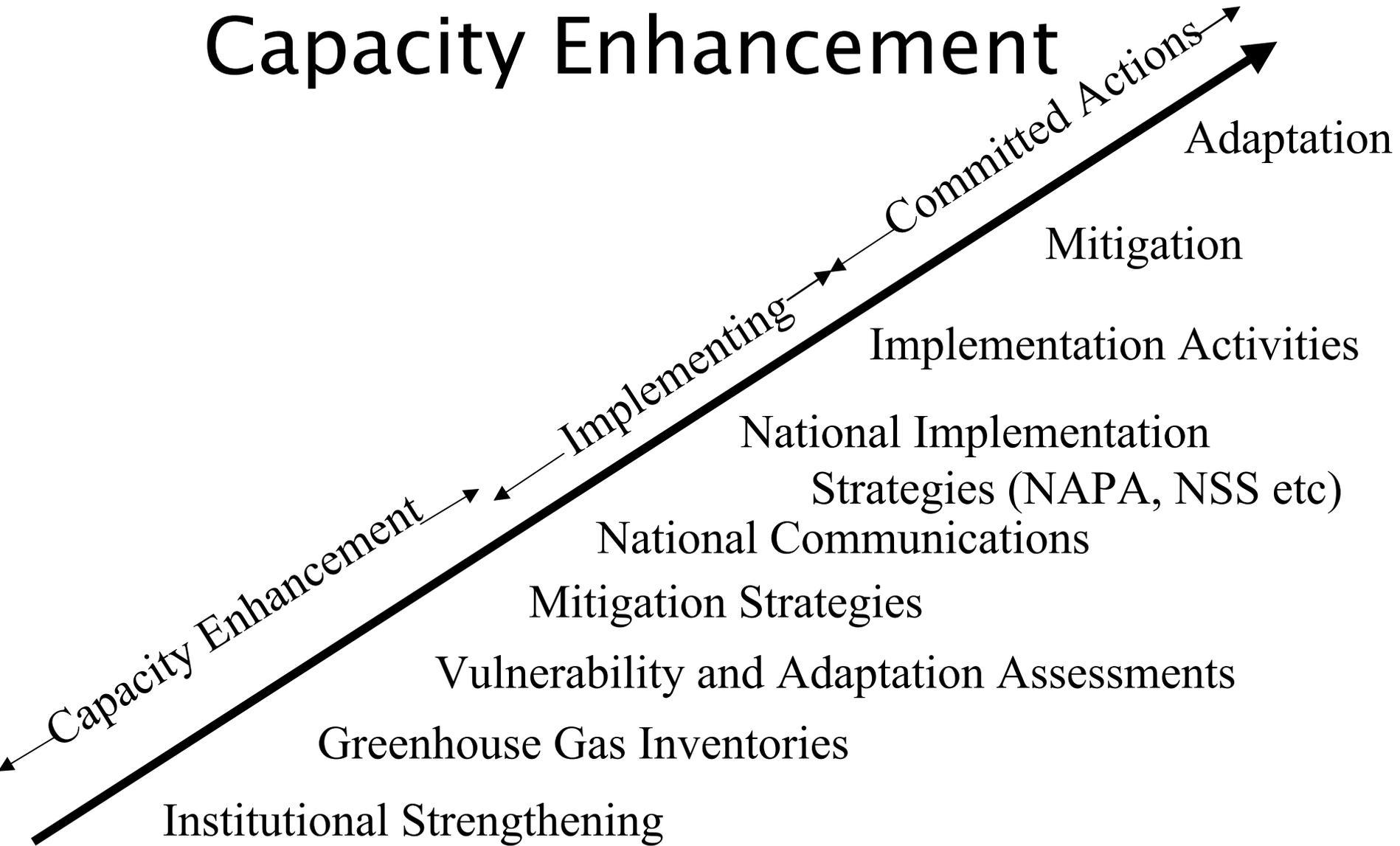
# Evolution of Climate Change Responses



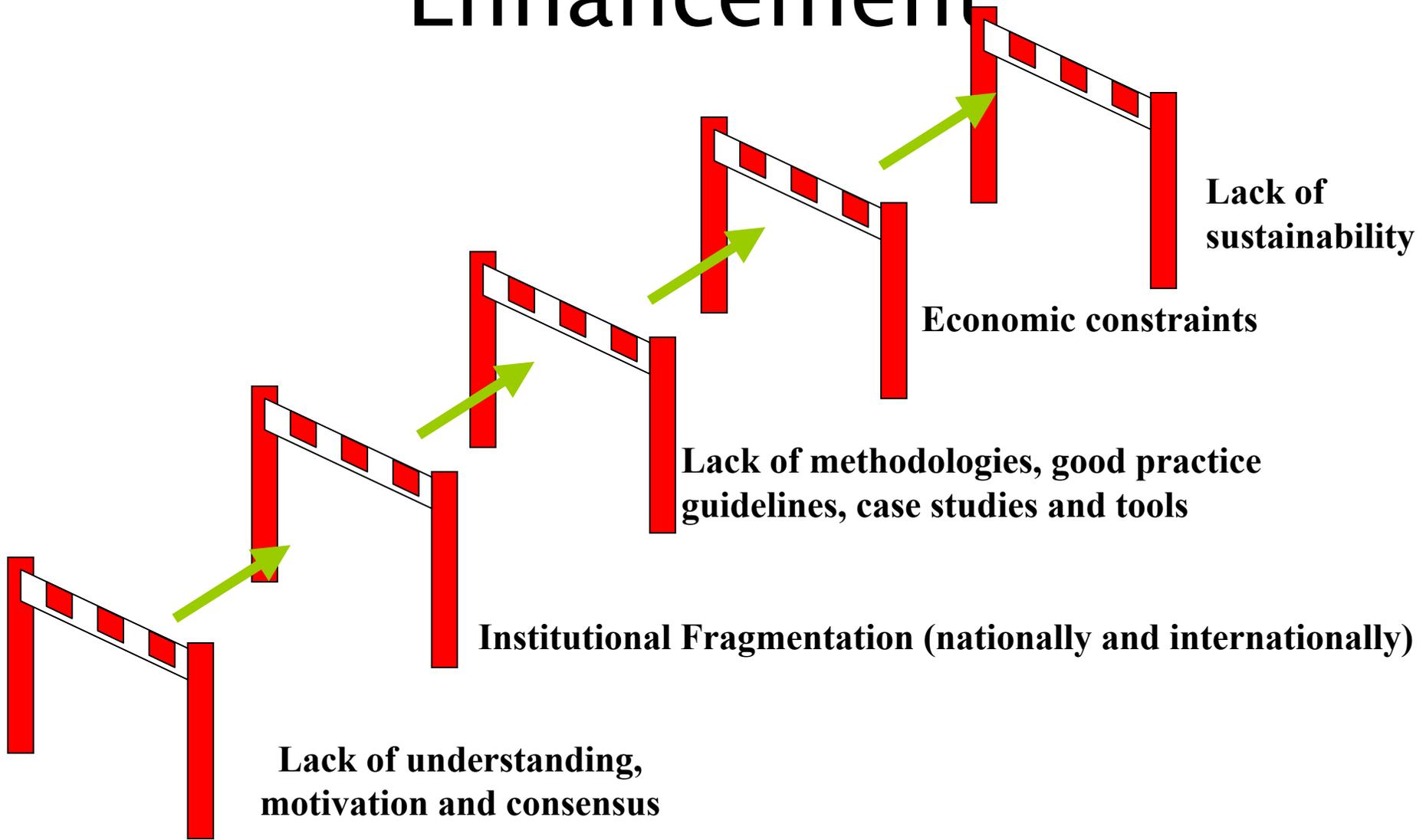
# Evolution of Climate Change Responses



# Historical Evolution of Capacity Enhancement



# Barriers to Capacity Enhancement



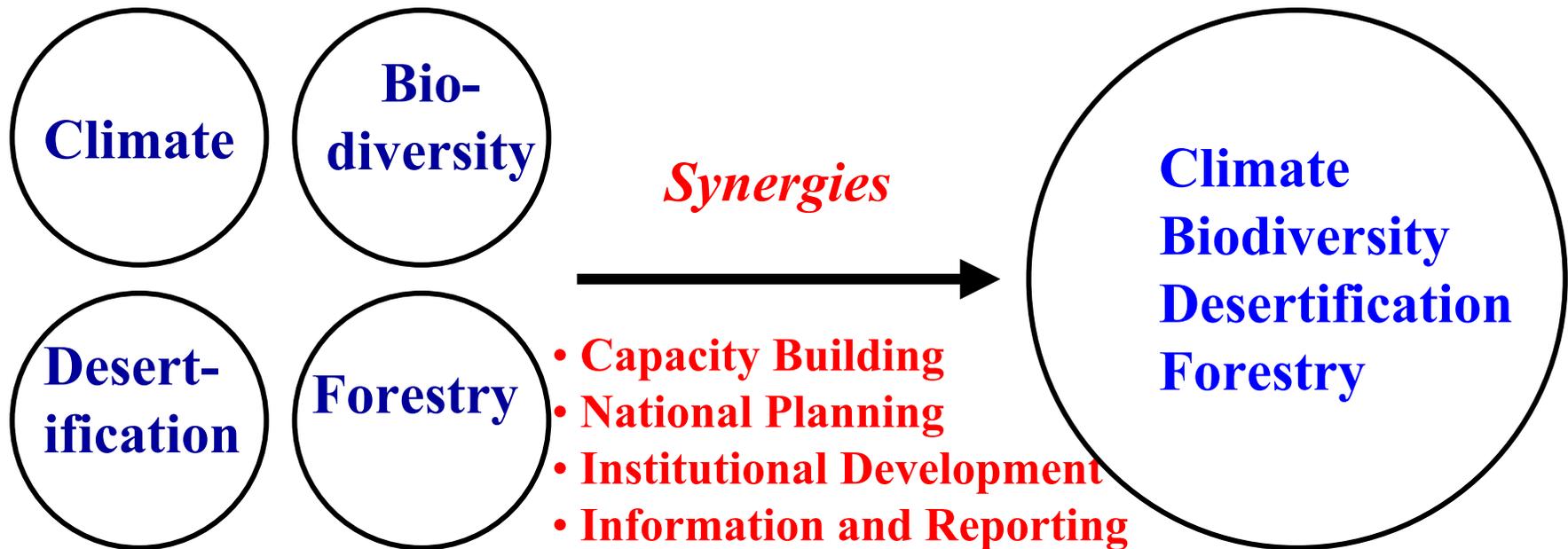
# Some Success Stories

- Robust but adaptive project designs:
  - Regional/international coordination and cooperation, with national implementation
- Initial focus on enhancing in-country capacity
  - In broadest sense (institutions, information, human resources....)
  - Multi-sectoral “country teams” fundamental
- Seek and capitalise on synergies
  - Both within and outside project focus – share not compete
- Focus on national and regional experts
  - Receive advanced training
  - Play critical roles, reducing/eliminating need for international experts
- Enhanced knowledge bases and understanding of climate change
  - across all sectors and key groups
- Sustainable outcomes (not output focussed)
  - Programmatic rather than project-based approaches
  - Bottom up and participatory – from outset!
  - Mainstreamed and well as targetted outcomes

# Some Lessons Learned

- **Find balance** between fulfilling *international obligations* related to climate change while also meeting *national needs*
  - Limited ability to do both means priorities must be set
- Resolve “**tension**” between international and domestic priorities and policies related to the environment
  - Must focus on “no regrets” (i.e “win win” ) approaches
  - Have greater focus on actions rather preparatory studies
  - Recognise the costs of *in-action*
- **Ensure benefits** beyond environment “sector” of government
  - Enhance capacity even further – all levels; all sectors
  - National economic plan is the tool by which climate change can be mainstreamed
  - Increase political participation and support
  - Address needs of rural and more distant communities as well as those most people and infrastructure are located
- **Achieve major benefits** from linking efforts related to all Rio agreements
- **Counter productive** if major/sole focus is on climate *change*
  - Need to link disaster response management with responses to climate variability *and* change

# *Integrated Implementation of Rio Agreements*



# Escalating and Emerging Challenges

*Need rapid growth in capacity are due to changing focus of international and national attention*

## *Recent and current focus:*

- Actions that slow the rate of climate change (mitigation)
- Voluntary measures to reduce national GHG emissions
- Domestic responses to mitigation
- Global warming impacts resulting from long-term changes in mean conditions

## *Growing emphasis on:*

- Actions that reduce the significance of adverse impacts and exploit any benefits (adaptation)
- Obligatory and enforced commitments to reduce GHG emissions
- Emissions trading and other multilateral responses
- Impacts resulting from changes in the frequency, magnitude and location of extreme events and from variability

Cont.

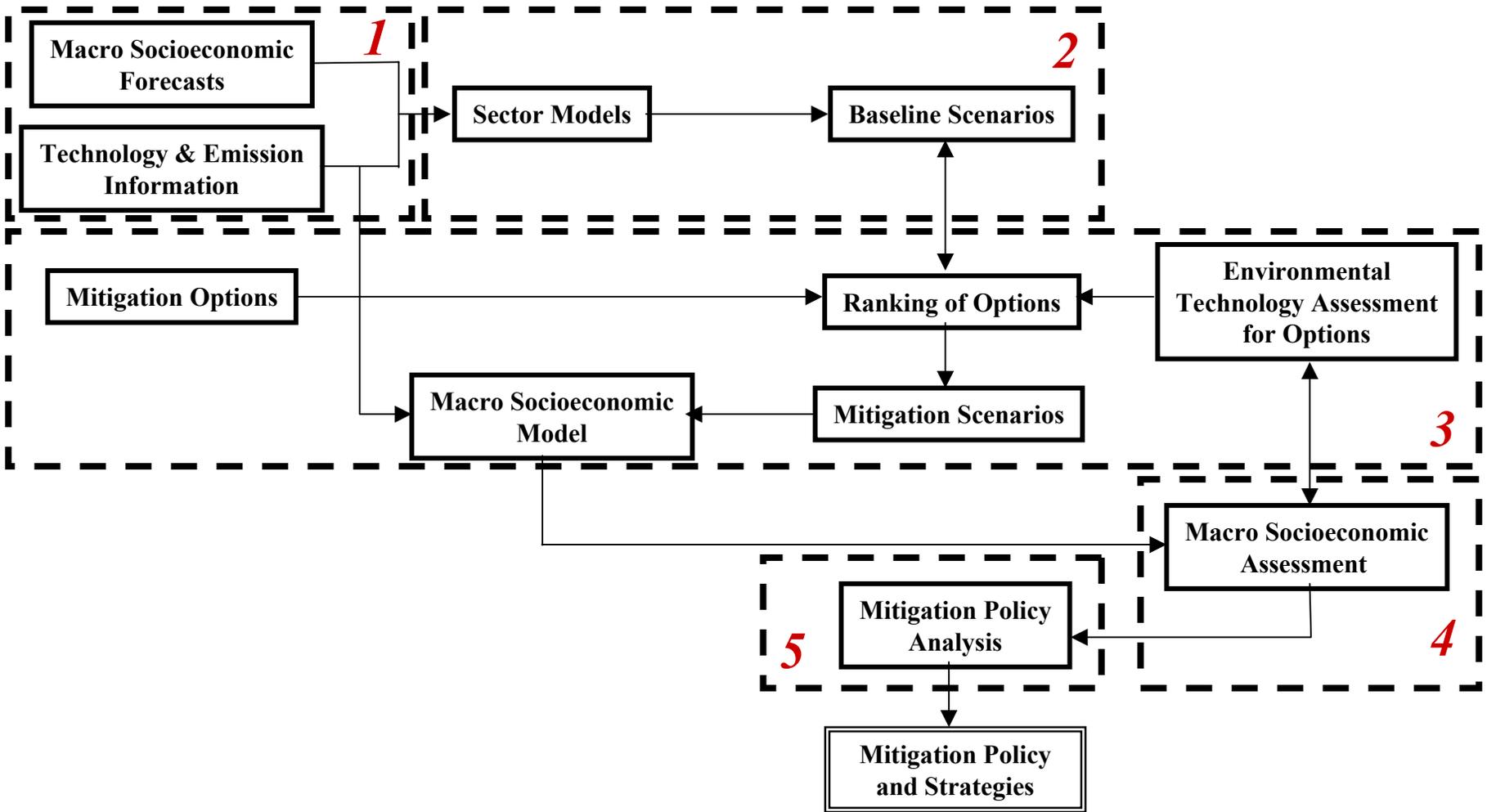
# Steps in Mitigation Analysis

*Information*

*Models*

*Analysis*

*Assessment*



# Environmental Technology Assessment

## *Online*

- A computer-based learning package
- Builds expertise in the use of the EnTA methodology
- Accessible via Web (Internet) and CD
- AICC compliant; SCORM

The logo for EnTA online features the text "EnTA" in a large, blue, serif font. Below it, the word "online" is written in a smaller, blue, italicized serif font. A stylized, light blue and green swoosh or orbital path curves around the text from the bottom left to the top right.

EnTA  
*online*

# EnTA Online is “State of the Art”

- Uses “best” learning practices
- Multimedia and interactive – with constructive feedback to the user
- Flexible – to meet diverse user needs and competencies
- Provides data for use in a learning management system
  - Tracks user performance
  - Assesses quality of the package

## About ETour Start



Photographer: Kartik Shinde/UNEP



UNEP

Division of Technology, Industry and Economics (DTIE)  
International Environmental Technology Centre (IETC)

Overview

EnTA  
Preparation

**Step 1**  
Technology  
Description



**Step 2**  
Identify  
Environmental  
Pressures



**Step 3**  
Preliminary  
Judgement  
of Impacts



**Step 4**  
Comparison  
of Options



**Step 5**  
Consensus &  
Recommendations

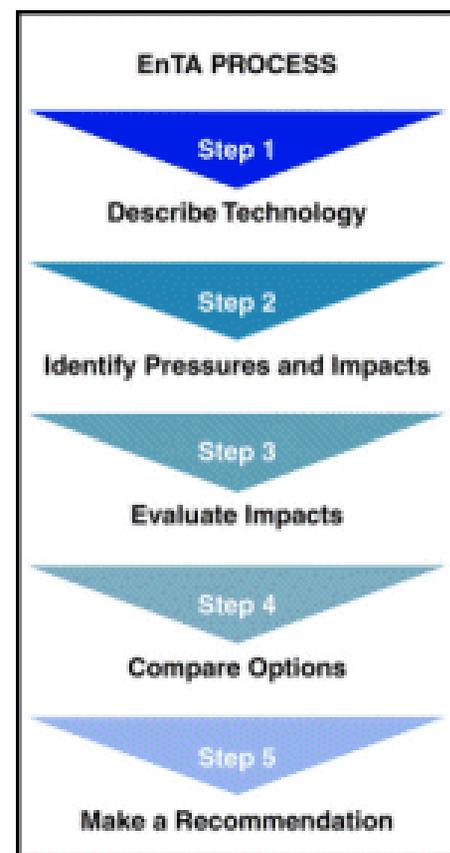
Follow-up Activities

My Progress

Help

## So What is EnTA?

- EnTA is a practical tool designed to help identify the potential impacts of different technological choices. In its simplest form EnTA is about helping people make good choices – for the environment, as well as themselves.
- There are five main steps involved in completing an assessment, in addition to which there are the preparations and follow-up activities (see diagram).
- To learn more about EnTA we will complete an EnTA using a practical, but fictitious **case study**. But before we start you might like to look at some of the resources below. This information will be available in the resources section at all times. To proceed click on the next button at the bottom of your screen.
- [Characteristics of EnTA](#)
- [Benefits of EnTA](#)
- [EnTA and other environmental management tools](#)



**EnTA Process Diagram**

Overview

EnTA  
Preparation

Step 1  
Technology  
Description

Step 2  
Identify  
Environmental  
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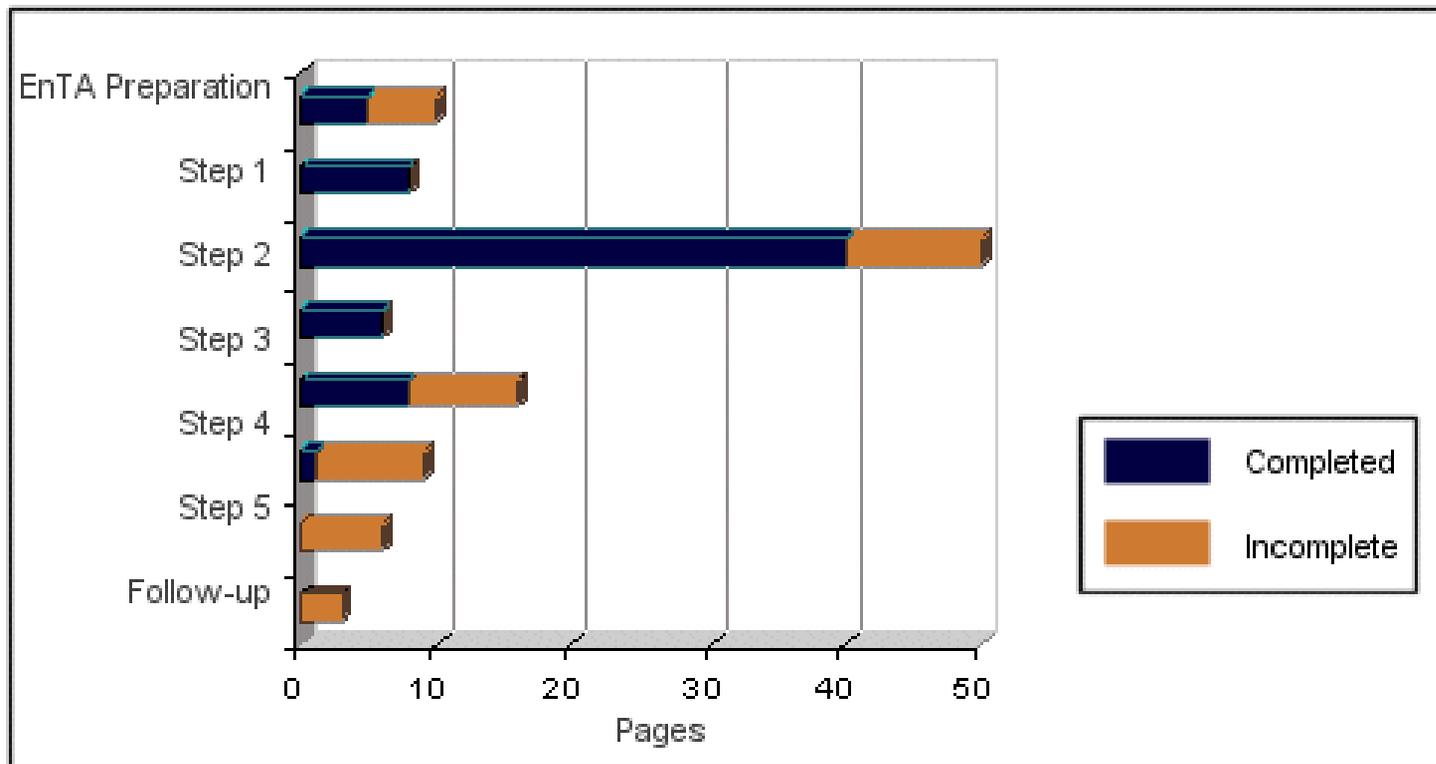
## My Progress

**Total time at EnTA Online:** 53 minutes

**Time spent this visit:** 12 minutes

### Assessment results

#### Progress per step:



# Escalating and Emerging Challenges (cont.)

*Need rapid growth in capacity are due to changing focus of international and national attention*

## *Recent and current focus:*

- Treating disaster risk management and climate change adaptation as two discrete activities
- Systematic assessments of vulnerability, resilience, impacts and adaptation options
- national and international initiatives

## *Growing emphasis on:*

- Managing the possible consequences of the full spectrum of hazards, from extreme events to the consequences of long-term climate change, in an integrated approach that exploits the synergies to be gained from such harmonization
- Risk management related to disasters and climate change and variability included in portfolio of national risks
- community-based responses

Cont.

# Escalating and Emerging Challenges (cont.)

*Need rapid growth in capacity are due to changing focus of international and national attention*

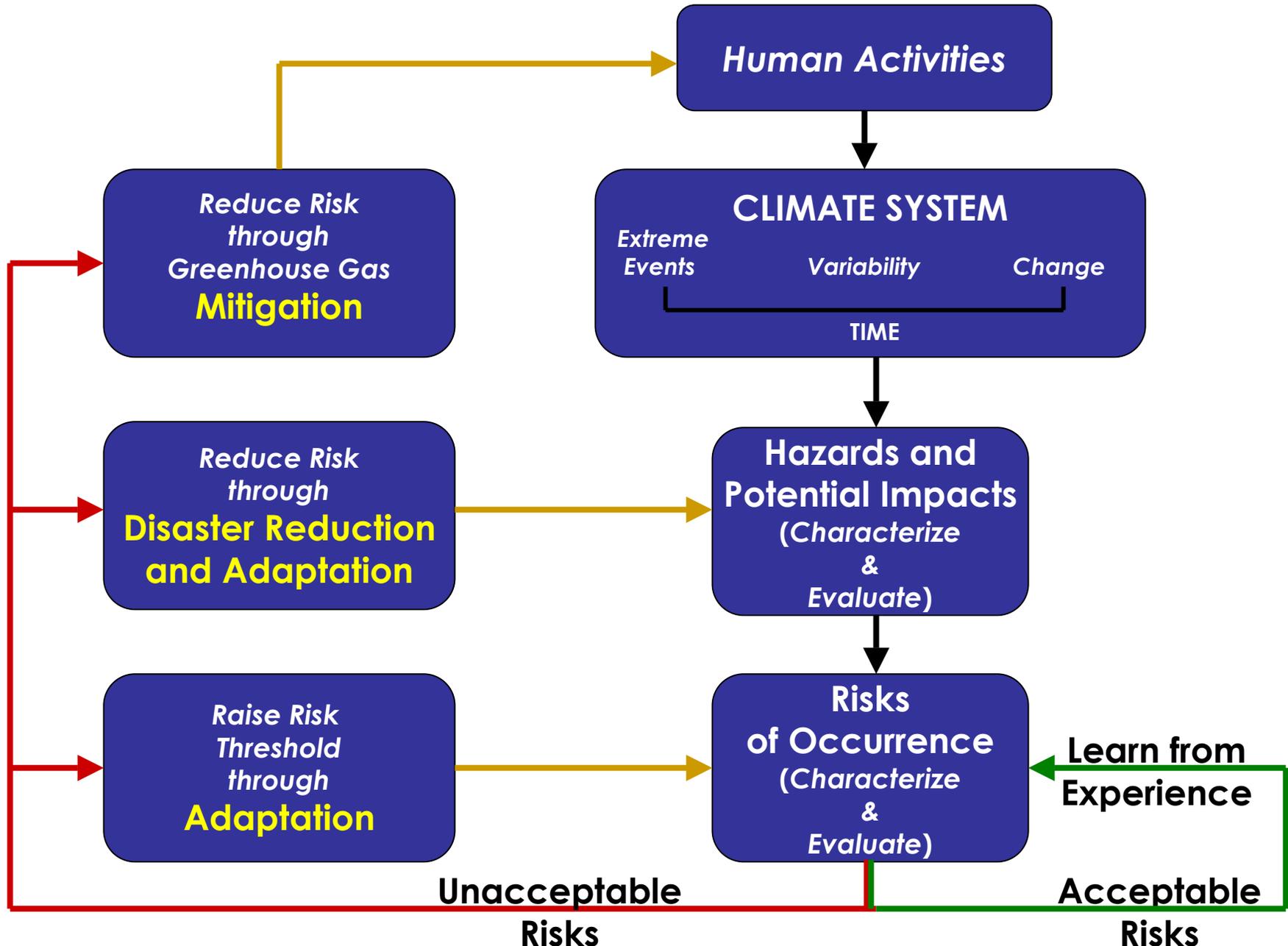
## *Recent and current focus:*

- funding only the incremental costs of adaptation to climate change, leading to an emphasis in financing large infrastructure projects
- viewing climate change as an environmental problem that can be managed through policies, plans and actions overseen by environment-focussed ministries, officials and organizations

## *Growing emphasis on:*

- adopting a more holistic approach that recognizes the priority requirements and optimal approaches for the most vulnerable and least developed countries
- mainstreaming and infusion of responses to climate-related issues throughout governments, the private sector and society at large.

# Integrating Disaster Reduction, Adaptation and Mitigation



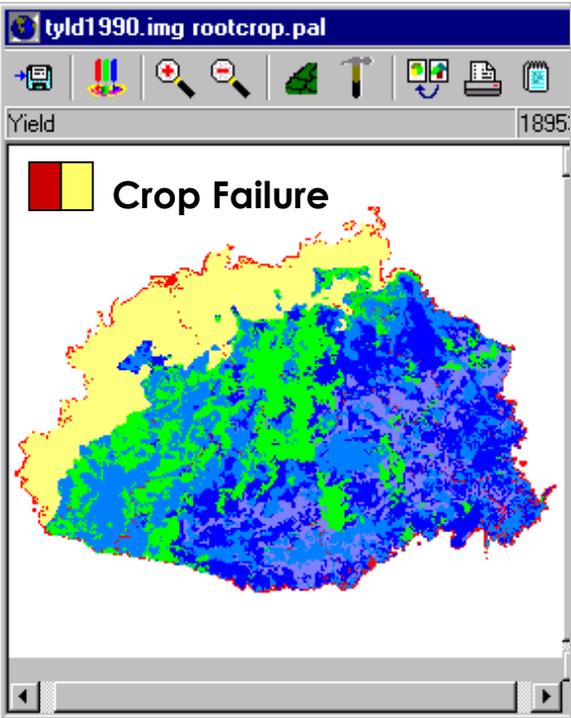
# Linking Disaster Response Management and Responses to Climate Variability *and* Change



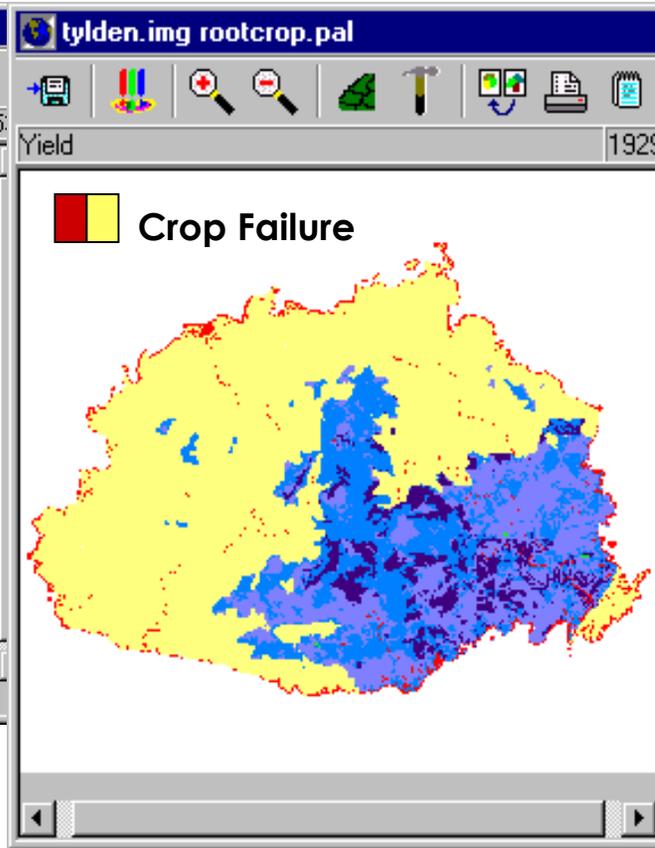
# How do we Mainstream Adaptation?

- Recognise that climate change is a significant *impediment* to successful economic development – i.e. a *risk*
- We are experiencing a foretaste of that risk – *climate variability*
- **Manage that risk** in an integrated manner – through *adaptation*
- Ensure National Development Plans and sectoral plans include *adaptation measures* that will *ensure risks are reduced to acceptable levels*
- Undertake *institutional strengthening* that results in Economic Ministries having a *mandate and responsibility* for ensuring that climate change is reflected in national policies and programmes
- *Improve decision making processes* – require that specific programmes and projects include strategies and measures to *manage risks* associated with climate change and variability
- Create an attitude of “Environment *for* Development”, as opposed to “Environment *and* Development”

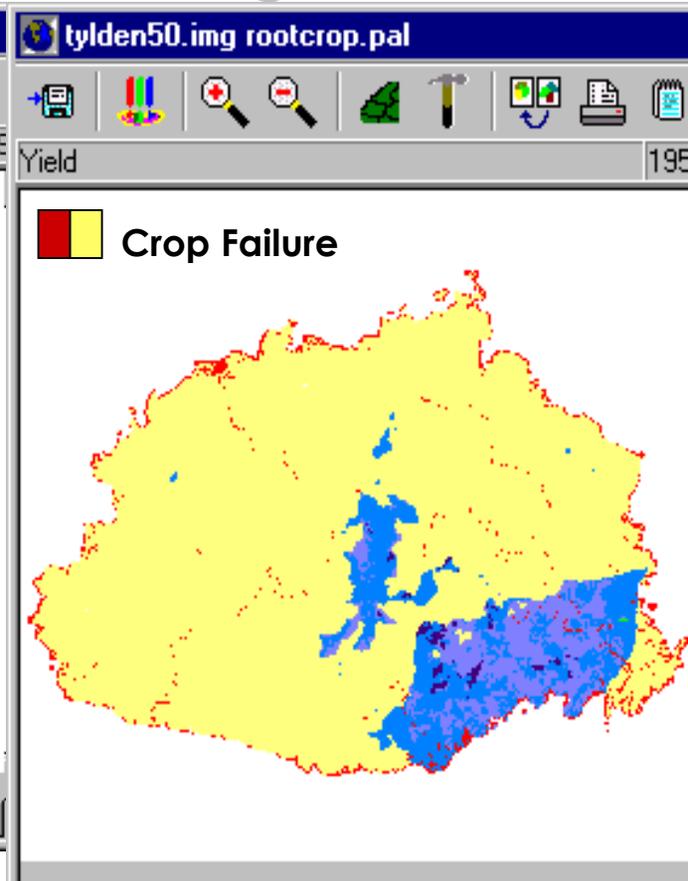
# Effects of Climate Change and El Nino on Dalo Production in Fiji



**Present Day**



**Current El Nino**

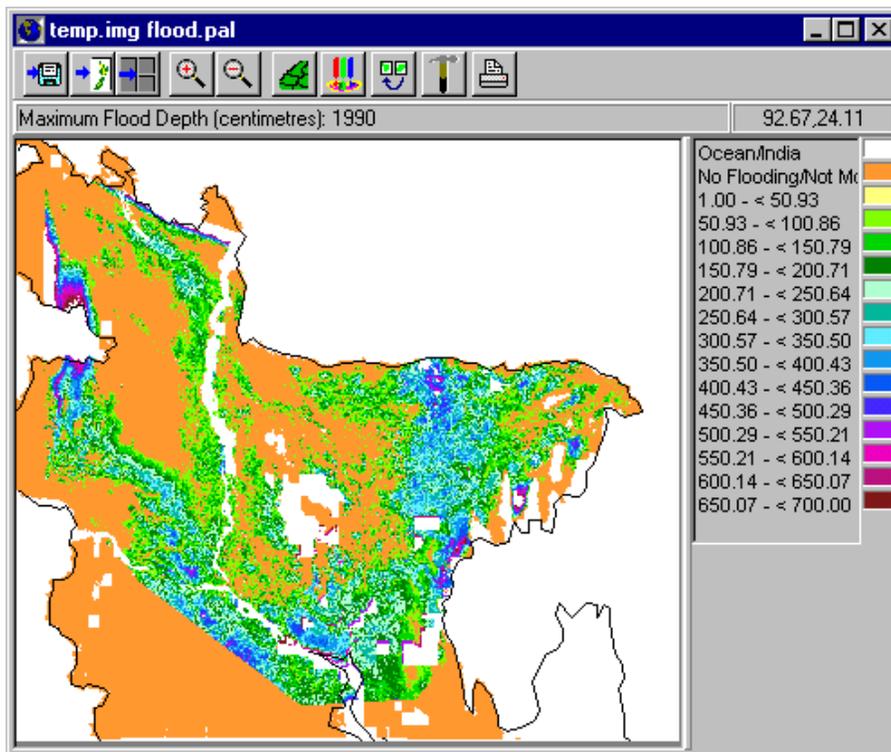


**2050 El Nino**

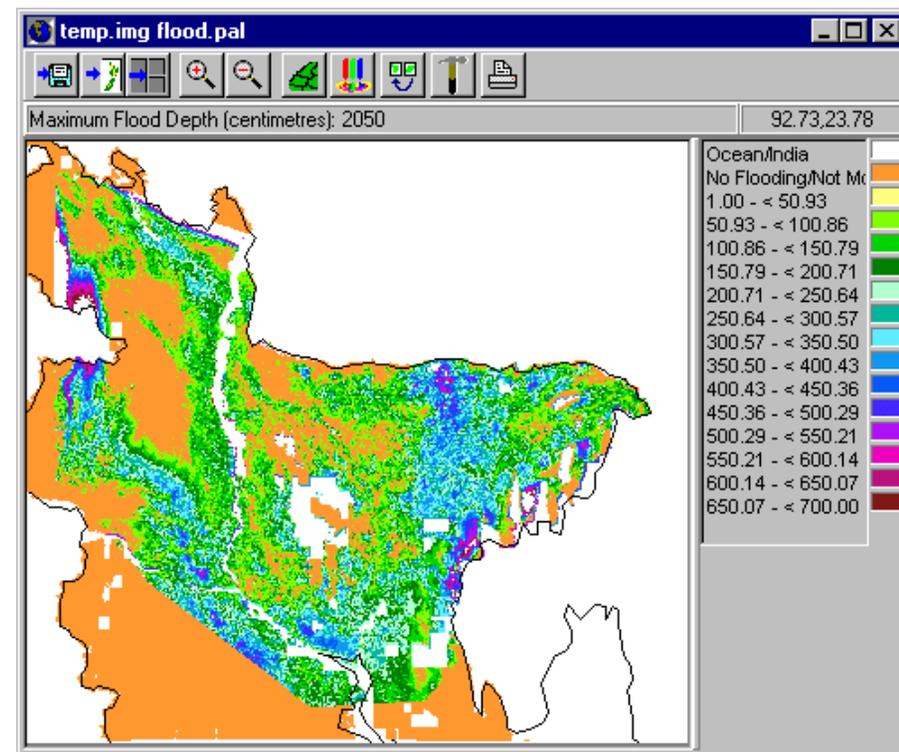
# Flood Risk and Climate Change

## Bangladesh: Flood Depth for 20-year Flood Event

### Current situation



### 2050

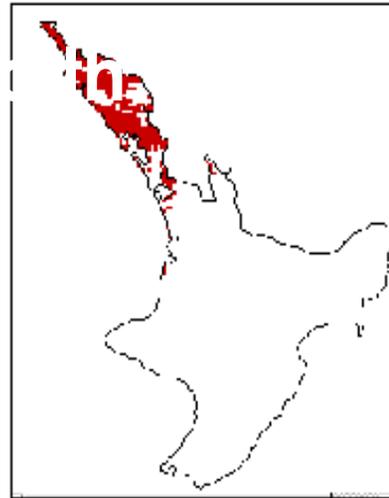


# Climatic Suitability for Aedes Albopictus

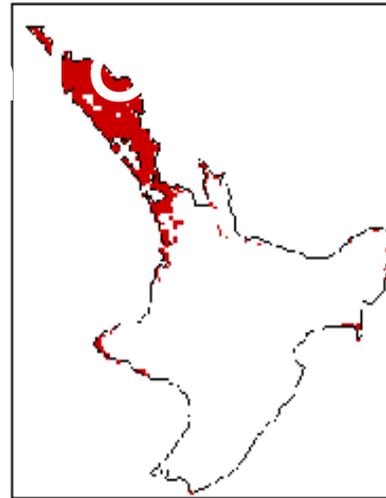


## Mid-range scenario

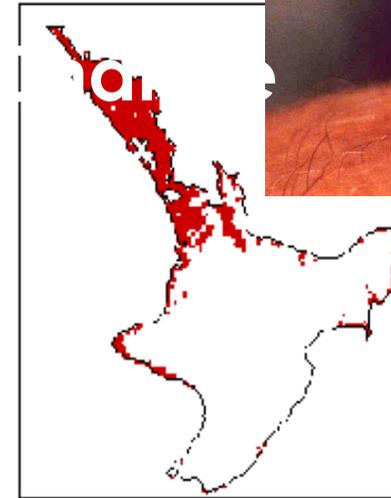
(SRES B2 GHG emission scenario, best guess climate sensitivity)



Present



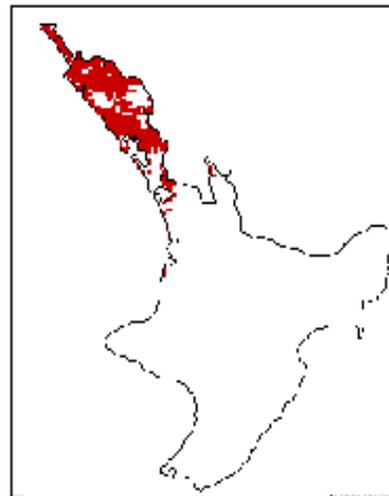
2050



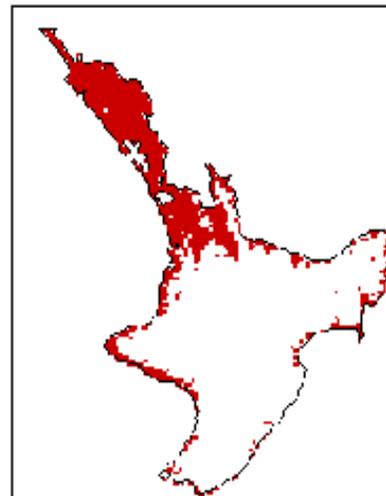
2100

## High-range scenario

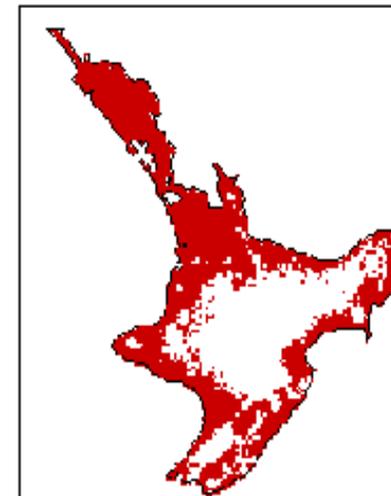
(SRES A2 GHG emission scenario, high climate sensitivity)



Present



2050



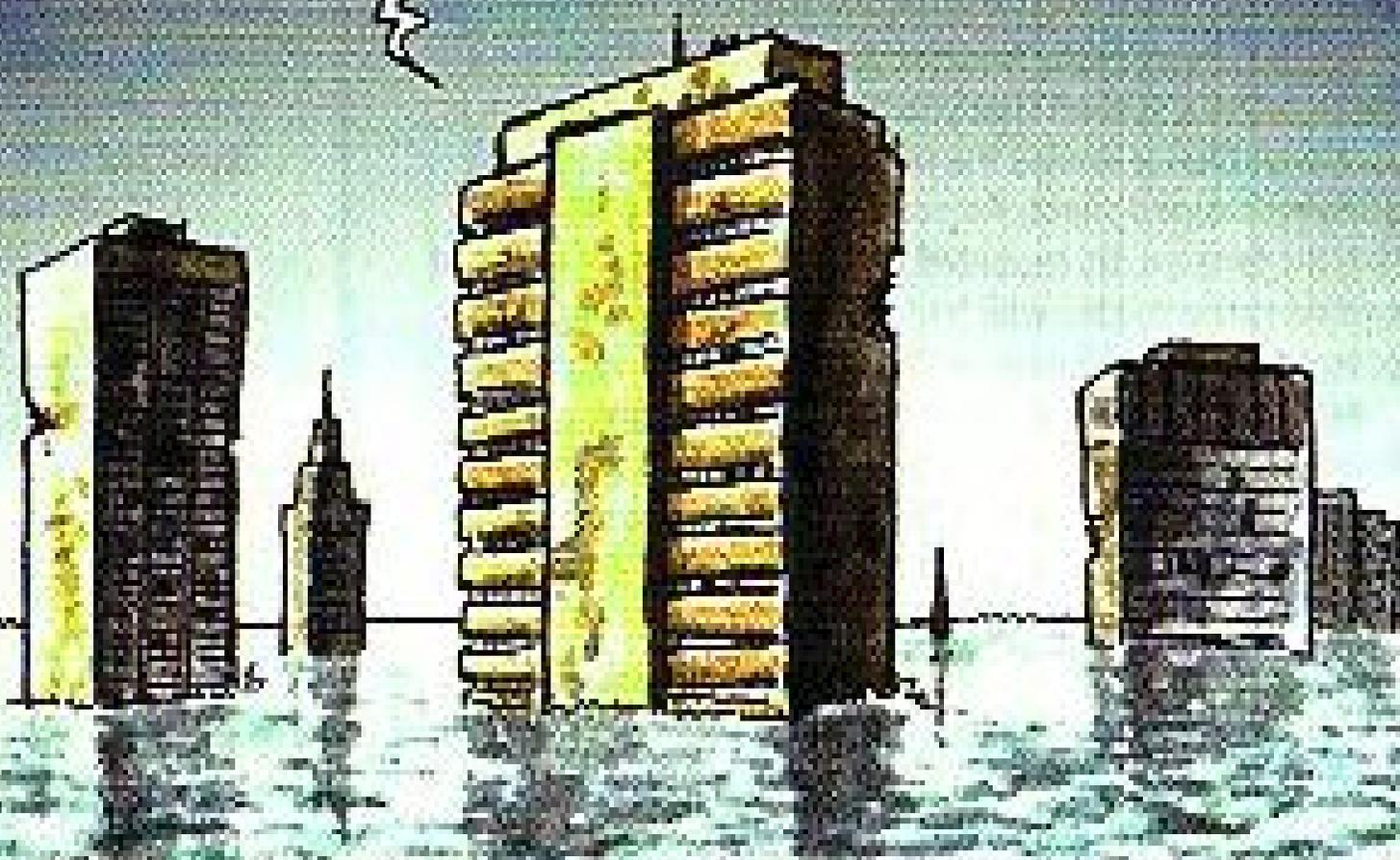
2100



# Conclusions & Recommendations

- Capacity enhancement
  - Is multi-dimensional and ongoing
  - Must evolve in concert with changing priorities and practices
  - There are many success stories and lessons learned that can guide future capacity enhancement activities
  - Requires more holistic approaches, both to address climate variability and change and to address sustainable development needs in general
- Foster regional and international coordination and cooperation, but with community-based implementation at national level
- Make improved use of information/communication technologies, both within country and internationally

AM, HELL... C'MON! WE HAD TUMBLE DRYERS...  
AIR CONDITIONING... CHEAP FLIGHTS... BIG CARS...  
FREE PLASTIC TOYS WITH OUR BREAKFAST CEREAL...  
I SAY IT WAS WORTH IT!



**Thank you.....**



THE BUSH ADMINISTRATION SHIFTS  
ITS POSITION ON *GLOBAL WARMING...*

FROM:

I DON'T  
SEE  
THE  
PROBLEM...

TO:

I DON'T  
SEE  
THE  
SOLUTION...

