

Adaptation to Climate Change – Developing a Policy Framework

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Adaptation defined:

“adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities”
(IPCC, 2001: 72)

Climate adaptation policy

Actions taken by governments including:

- legislation
- regulations
- incentives
- plans
- programmes

to mandate or facilitate changes in socio-economic systems that are aimed at reducing vulnerability to climate change

Vulnerability -

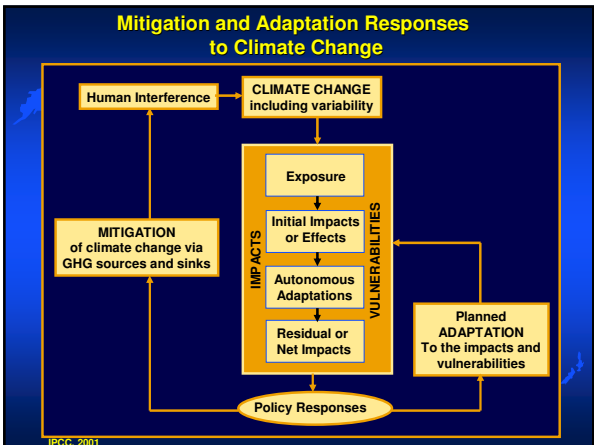
the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change

Adaptive capacity -

the ability of a system to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with the consequences

Policy pathways:

1. Preventing dangerous interference with the climate system by stabilising greenhouse gas concentrations in the atmosphere **"mitigation"**
2. Reducing vulnerability to climate change **"adaptation"**



Importance of Adaptation

- **Developing countries:**
 - The poorest countries are the most vulnerable
 - more dependent on climate-sensitive natural resources
 - less able economically to cope with impacts
 - They need to reduce their vulnerability in the most effective ways
 - Funding adaptation is an important issue

Development itself is key to adaptation

DEVELOPING A POLICY FRAMEWORK KEY CONSIDERATIONS

1. *Assessment of current vulnerability and policy*
2. *Design of Policy Initiatives and Alternatives*
3. *The broader context of Adaptation Policy*

DEVELOPING A POLICY FRAMEWORK KEY CONSIDERATIONS

➤ Adaptation policy to reduce vulnerability

1. *Assessment of current vulnerability and policy*

Human societies have always adapted to their climatic environment and adaptation policy already exists; therefore:

Begin by assessing:

- i) current vulnerability to present day climate, including its variability and extremes, and
- ii) the ways that existing policy and development practice serves to reduce vulnerability

Examine, e.g.

- Recent experience with climate variability and extremes
- Resulting economic damage and how it has been distributed spatially
- Other non-economic impacts – social, environmental
- Trends in impacts and how they can be explained
- Adaptation policies used in the past and their level of success
- Effect of public (planning) policy on impacts and adaptation

KEY CONSIDERATIONS continued

➤ Adaptation policy to reduce vulnerability

2. *Design of Policy Initiatives and Alternatives*

Take account of what can be surmised about future conditions, including climate change and changes in the socio-economic environment

- In what ways is climate expected to change?
- What are the prospects for economic and sustainable development and how will this affect or be affected by climate change impacts?
- What are the prospects for adaptation?
- How much can vulnerability be reduced?
- What are the constraints and limitations to public policy for adaptation?

1. *Assessment of current vulnerability and policy* and
2. *Design of Policy initiatives and alternatives*

	I Assessment of Current Policy	II Design of Policy Initiatives and Alternatives	
S T A K E H O L D E R S	→ 1. Socio-economic and development context	1. Socio-economic and development scenarios	→ A
	→ 2. Current policies and management practices in the natural resources and environment sectors	2. Future resource management and environmental trends and objectives	→ D
	→ 3. Current climate risks including variability and extremes	3. Future climate risk (change, variability and extremes)	→ P
	→ 4. Current or baseline adaptation assessment	4. Adaptation improvements and innovations for climate change	→ T
	→ 5. Policies and measures proposed to improve current adaptation	5. Policy options and measures and their evaluation	→ I
			→ V
			→ E
			→ C
			→ A
			→ P
			→ A
			→ C
			→ I
			→ T
			→ Y

Burton et al., 2002

KEY CONSIDERATIONS continued

3. The broader context of Adaptation Policy

- Effective climate change adaptation policy has to be incorporated into other policies:
 - agricultural policy
 - tourism
 - industrial development
 - water resources management
 - coastal zone management
 - human settlements etc.
 - hazard mitigation
- Current climate risks are best assessed in the light of these related policies
- Adaptation planning must be mainstreamed – included in all areas of national development policy

ROLE OF GOVERNMENT

- Establishing the policy frameworks to encourage and strengthen adaptation
 - Providing high quality information
 - Effective land use planning and performance standards
 - Ensuring climate change is considered in investment decisions

ROLE OF GOVERNMENT

- Engaging in good development practice
 - reducing vulnerability and increasing adaptive capacity
 - economic diversification => increased income and food security
 - improved education and health systems
 - improved physical planning, public services and infrastructure

ROLE OF GOVERNMENT

- Engage in hazard mitigation planning, policy development and implementation
 - include disaster preparedness and management
 - integrate disaster risk reduction into adaptation planning and consequently into all aspects of national planning and policy

Overall Outcome:

- Adaptation planning => building resilience to climate change impacts

Key Challenges

- Access to timely, reliable information
- Effective information dissemination
- Commitment to land use planning and performance and enforcement standards
- Budgeting for adaptation in national planning
 - competing demands for public resources;
 - identifying funding
- Locating adaptation within influential Ministries
- Developing technical capacity

ROLE OF PLANNING

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1. Assessment of current vulnerability and policy
2. Design of Policy Initiatives and Alternatives
3. The broader context of Adaptation Policy

