



WMO

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



CLIMATE CHANGE: IMPACTS, ADAPTATION, AND VULNERABILITY UNEP

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GUIDANCE NOTES FOR AUTHORS ON THE IPCC WORKING GROUP II CONTRIBUTION TO THE FOURTH ASSESSMENT REPORT

CLIMATE CHANGE 2007: IMPACTS, ADAPTATION AND VULNERABILITY

Introduction

At the Seventh Session of IPCC Working Group II, 4-5 November 2003 in Vienna, the outline of the IPCC Working Group II contribution to the Fourth Assessment Report (IPCC-XXI/Doc.22) was approved and subsequently accepted by the 21st Session of the IPCC. It was decided that a number of comments of a more detailed nature, made by Governments from the floor, would be noted and would be made available by the co-chairs to the authors as additional guidance in the preparation of the Fourth Assessment Report. These comments are listed below.

A. ASSESSMENT OF OBSERVED CHANGES

Chapter 1. Assessment of Observed Changes and Responses in Natural and Managed Systems

- It was agreed that Co-chairs, in discussion with the writing teams, will standardise the topics/fields covered in the systems/sectors section to match, as far as possible, the topics/fields in chapters 3 to 8.
- The cryosphere topic may be mainly covered by WG1 and the writing team needs to liaise accordingly.
- The hydrology and water resources topic may be partly covered by WG1 and the writing team needs to liaise accordingly.
- The coastal processes and zones topic may be partly covered by WG1 and the writing team needs to liaise accordingly.
- Under the bullet "Assessing the relation of observed changes in systems to regional climate trends", the writing team should include an assessment of the regional distribution of observed changes and where ever there are spatial concentrations of these.

B. ASSESSMENT OF FUTURE IMPACTS AND ADAPTATION: SYSTEMS AND SECTORS

Chapter 2. New Assessment Methodologies and the Characterisation of Future Conditions

- This chapter should cover both impact and adaptation methods.

Content guide for Chapters 3 to 8

- Consideration of extreme events should include storm surges and seiches where appropriate.
- When discussing future trends, writing teams should be clear about the reference case trends (i.e. in a future without climate change).
- Assessment of key future impacts and vulnerabilities should include consideration of (a) rates and magnitudes and (b) the effects of extreme events.
- Adaptation practices, options and constraints should cover opportunities and limitations/barriers and timeframes/planning horizons.
- Adaptation refers to exogenously driven policies/response measures in addition to endogenous responses.

Chapter 3. Fresh Water Resources and their Management.

- No specific comments were made on this chapter.

Chapter 4. Ecosystems, their Properties, Goods and Services

- This chapter should cover animals, plants, soils and landforms within each zone,
- The writing team is asked to consider the range of preceding assessments (e.g. Millennium Ecosystem Assessment, Arctic Climate Impact Assessment).
- Impacts considered should include those from climate/weather and also those from secondary effects e.g. via sea level rise, sea temperatures etc.
- The effects of fires should be considered
- The focus in the wetlands section is on inland wetlands, as opposed to coastal wetlands which will be covered in chapter 6.
- Freshwater lakes and rivers should include water as a habitat.
- Oceans, shallow seas and their ecosystems should include water as a habitat.
- Oceans need appropriate attention in their own right.

Chapter 5. Food, Fibre and Forest Products

- Food-crop farming should include tree crops.
- Forestry should cover both timber and non-timber forest products and include agro-forestry.
- There is a strong link between subsistence systems, local food supply, regional employment and rural livelihood and chapter 7.
- A discussion of further environmental consequences should cover land use and land cover futures.

Chapter 6. Coastal Systems and Low-lying Areas

- This chapter should include integrated coastal zone management and changes in regional sea level and sea ice.
- Coral reefs should cover coral systems, not reefs alone.
- When considering human settlement, built infrastructure, industrial development and migration, the writing team should be clear about assumed sea defences.

Chapter 7. Industry, Settlement, and Society

- The consideration of energy should include renewables and bio-energy.
- When considering water supply, the writing team should ensure interaction with chapter 3.
- Social issues should draw together issues from earlier sectoral chapters (chapters 3 to 6) (and include gender aspects.)
- Livelihood should include rural livelihood and employment, including gender aspects.

Chapter 8. Human Health

- This chapter should include related psychological aspects
- Physical effects of extreme weather and climate events should include hydrological aspects.
- The demographic, economic and social aspects of health should include gender aspects.
- Cumulative effects and multiple stresses should include the effects of responses to impacts e.g. use of pesticides and should consider the issue of skin cancer.

C. ASSESSMENT OF FUTURE IMPACTS AND ADAPTATION: REGIONS

- Current adaptation should include efficacy of current practices and lessons learnt.
- When discussing future trends, writing teams should be clear about the reference case trends (i.e. in a future without climate change). Spatial differences in trends should be discussed.
- Assessment of key future impacts and vulnerabilities and their spatial variation should specifically include (a) key rates/magnitudes (b) effect of extreme events.
- Adaptation practices, options and constraints and their spatial variation should include barriers, opportunities, limitations.
- Case studies should illustrate both impacts and adaptation issues.
- Implications for sustainable development should include co-benefits and their opposite.
- Research gaps should include gaps in observational data.

Chapters 9 to 14: Africa; Asia; Australia and New Zealand; Europe, Latin America and North America.

- No specific comments were made on these chapters.

Chapter 15: Polar Regions (Arctic and Antarctic)

- This chapter should cover the Southern Ocean.
- Note that management related aspects of the Arctic (e.g. socio-economic and conservational issues) are affected by the regions in which they are located, and may be covered in other regional chapters. Writing teams should liaise about this.

Chapter 16: Small Islands

- This chapter should include especial attention to the particular vulnerability of islands.

D. ASSESSMENT OF RESPONSES TO IMPACTS

Chapter 17: Assessment of Adaptation Practices, Options, Constraints and Capacity

- This chapter should cover adaptation opportunities and practice.
- Methods and concepts need clear definitions.
- Current vulnerability should be assessed at varying scales.

Chapter 18. Inter-relationships between Adaptation and Mitigation

- This exploratory chapter should link with Chapter 3 in WGIII AR4.

Chapters 19. Assessing Key Vulnerabilities and the Risk from Climate Change

- No specific comments were made on this chapter.

Chapter 20. Perspectives on Climate Change and Sustainability

- No specific comments were made on this chapter.

List of authors, reviewers

Glossary

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