



IPCC Special Report on Climate Change and Land

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King Abdulaziz City for Science and Technology
Riyadh, Saudi Arabia
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History

2015 - 41st Session of the IPCC (Nairobi, Kenya): The Panel asked IPCC Secretariat to invite Member States and Observer Organizations to submit views on potential themes for Special Reports during the AR6 cycle.

- July 2015: IPCC issued call for topics
- Topics analysed by Co-Chairs and clustered by theme

2016 - 43rd Session of the IPCC (Nairobi, Kenya): Co-Chairs presented proposed Special Report themes to the Panel for discussion.

- 9 clusters on different themes including land, oceans, cities
- 2nd biggest cluster: 7 proposals relating to **land**

Proposals related to Land



Country or Organisation	Topic
Saudi Arabia	Desertification with Regional Aspects
Algeria	Climate Change and Desertification

“Desertification ranks among today’s greatest environmental challenges with clear social and economic consequences involving dry land populations and beyond.

These challenges have been growing rapidly along with their consequences. Addressing these challenges has been hampered by information gaps in some regions.”

History

2016 - Decision adopted by the Panel at 43rd session of the IPCC:


*To prepare a Special Report on **climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.** The scoping process may consider challenges and opportunities for both adaptation and mitigation.*





Scoping the content of the Special Report

To inform the Scoping Meeting on this Special Report, a **questionnaire** was sent to IPCC Focal Points and Observer Organizations to consult on:

- Highest priority questions, in the context of climate change, that the report should address
- Gaps in previous IPCC assessments
- Policy relevance of this Special Report for different regions


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Pre-scoping questionnaire: IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

For circulation to National Focal Points and Observer Organizations.

1. Which National Focal Point / Observer Organisation is submitting this response? :

Name: Email:

The issues in-depth

The Scientific Steering Committee also held in-depth web conferences with:

- UN Convention on Combatting Desertification (UNCCD)
- Food and Agriculture Organization (FAO)
- Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)

Scoping the content of the Special Report

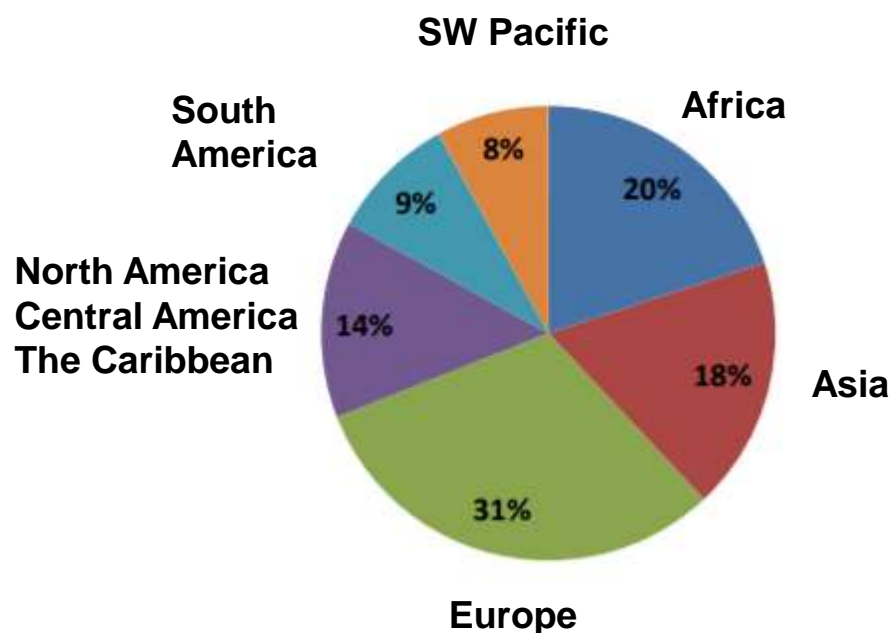
Priority areas identified in the questionnaire included:

- **Drivers of desertification, land degradation**, changes in GHG fluxes and food security and their relation to climate change
- How **land based mitigation and adaptation measures** can contribute to food security and resilience.
- The feedback between sustainable land management choices and **impacts on desertification, land degradation**, food security, and GHG fluxes
- The current **state of land degradation, desertification**, and food insecurity
- **Innovation** and technology deployment
- Local and regional **impacts**

Scoping meeting in Dublin, Ireland (2017)

Nominations for 458 experts were received.

Final participant list included 69 nominated experts and 31 Bureau Members, covering 46 nationalities.

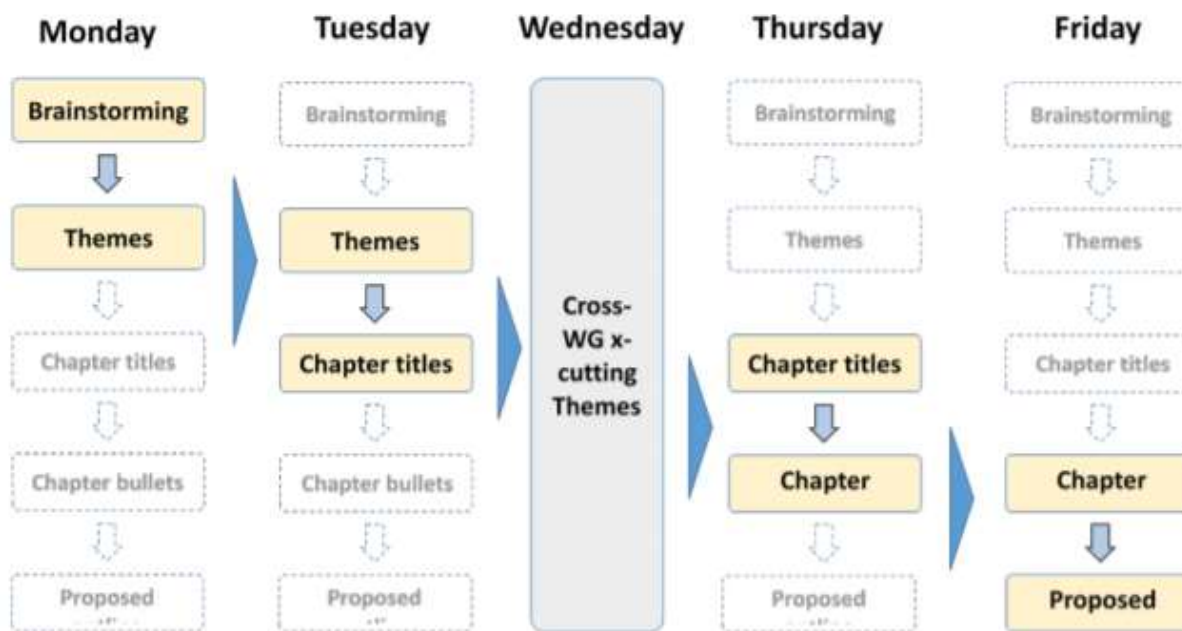


Taha Zatari, Vice-Chair of IPCC Working Group II, participated in the meeting



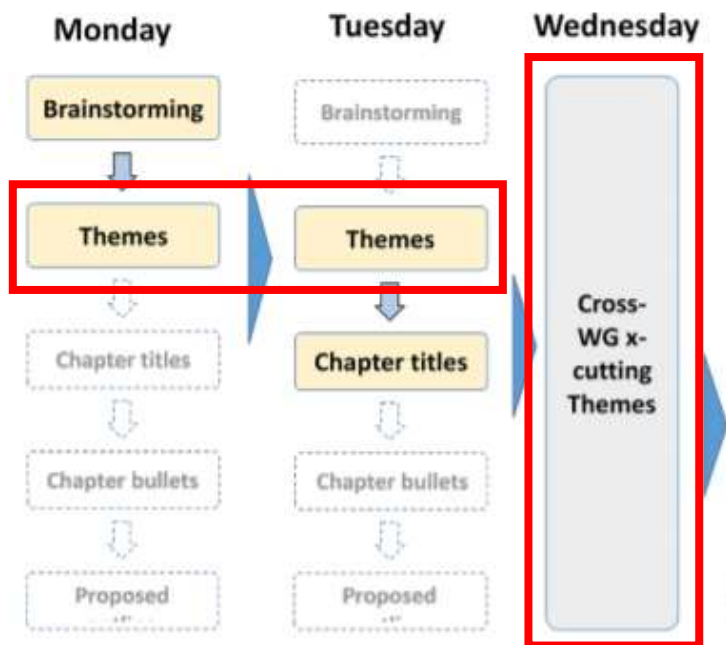
Scoping meeting in Dublin, Ireland (2017)

- Structured bottom-up process: no draft outline to start the meeting



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Day 1 to 3 - Themes identified:

- Climate change impacts and response options in relation to SDGs
- Adaptation/mitigation interactions (synergies, trade-offs, co-benefits, side-effects)
- Competition for land, including negative emissions
- Coupled system dynamics: processes, scales
- Emergent risks (e.g. security, migration, ...)
- Governance, management, decision-making
- Water and soils

Scoping meeting in Dublin, Ireland (2017)

- Outline emerged over the course of the week through interactive series of discussions

Days 4 and 5:

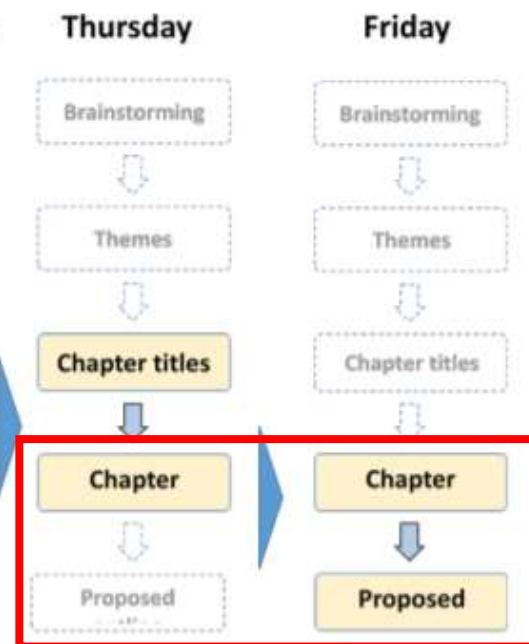
Refine the topics and themes into a report outline with chapter headings

Bullets under each heading to provide meaningful guidance to authors

Recommended maximum length of the Special Report (300 pages)

Title agreed:

Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems



Special Report Outline

Agreed at 45th session of the IPCC in Guadalajara, Mexico (March 2017)

Summary for Policy Makers **Technical Summary**

- Chapter 1:** Framing and Context
- Chapter 2:** Land-Climate Interactions
- Chapter 3:** Desertification
- Chapter 4:** Land Degradation
- Chapter 5:** Food Security
- Chapter 6:** Interlinkages between desertification, land degradation, food security and GHG fluxes: Synergies, trade-offs and Integrated Response Options
- Chapter 7:** Risk management and decision making in relation to sustainable development

Boxes, Case Studies and FAQs

Chapter 3: Desertification

- The specific nature of desertification
- Status, current trends and future projections of desertification linked to climate change, globally and regionally
- Climatic and anthropogenic direct and indirect drivers of desertification including extremes such as drought
- Attribution: distinguishing between climatic- and human-induced changes
- Desertification feedbacks to climate, including sand and dust storm
- Climate-desertification interactions, including past observations and future projections
- Observed and projected impacts of desertification on natural and human systems in a changing climate. This could include the role of aerosols and dust, impacts on ecosystem services and impacts on socio-ecological systems
- Technological, socio-economic and policy responses to desertification under a changing climate including economic diversification, enabling conditions, co-benefits as well as limits to adaptation
- Hotspots and case-studies

Chapter 4: Land degradation

- Processes that lead to degradation and their biophysical, socio-economic, and cultural drivers across multiple temporal and spatial scales
- Linkages and feedbacks between land degradation and climate change, including extremes (e.g. floods and droughts), erosion, and their effects on ecosystems and livelihoods
- Status, current trends and future projections of land degradation linked to climate change, globally and regionally
- Attribution: distinguishing between climatic- and human-induced changes
- Direct and indirect impacts of Climate Change on Land Degradation, Land Degradation on Climate Change, and reactive and proactive response options, such as land restoration, for key socio-ecological systems
- Observed and projected impacts of land degradation on natural and human systems in a changing climate. This could include impacts on ecosystem services and impacts on socio-ecological systems
- Integrated higher-level responses, e.g. sustainable land management (where possible related to the SDGs), including considerations of cost, incentives and barriers and limits to adaptation
- Hotspots and case-studies

Selecting authors for the Special Report

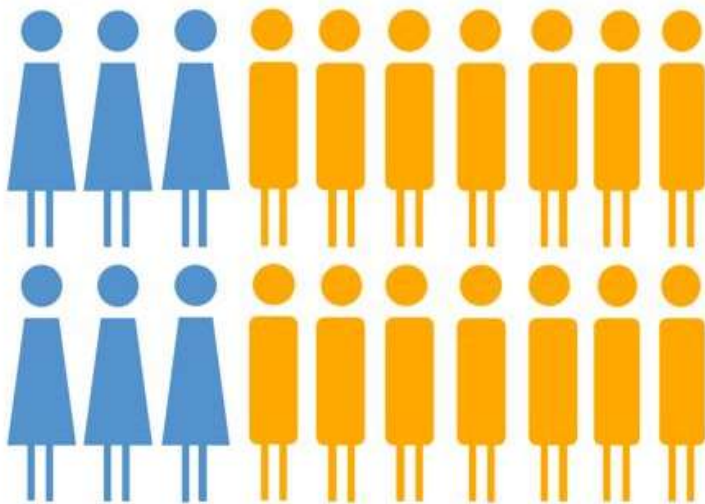
Nominations were sought for Authors and Review Editors for each Chapter.

640 nominations were received.

IPCC Working Group Bureaux and the Co-Chairs of the Task Force on National Greenhouse Gas Inventories carried out the selection, taking into account:

- Expertise
- Geographic representation
- Gender balance
- Prior IPCC experience.

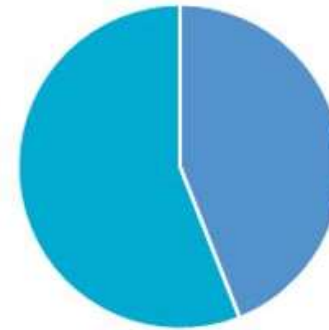
Selecting authors for the Special Report



32% are women

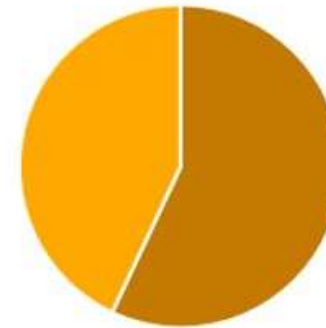
68% are men

56% are from developing countries



44% are from developed countries

43% are new to the IPCC process



57% have IPCC experience

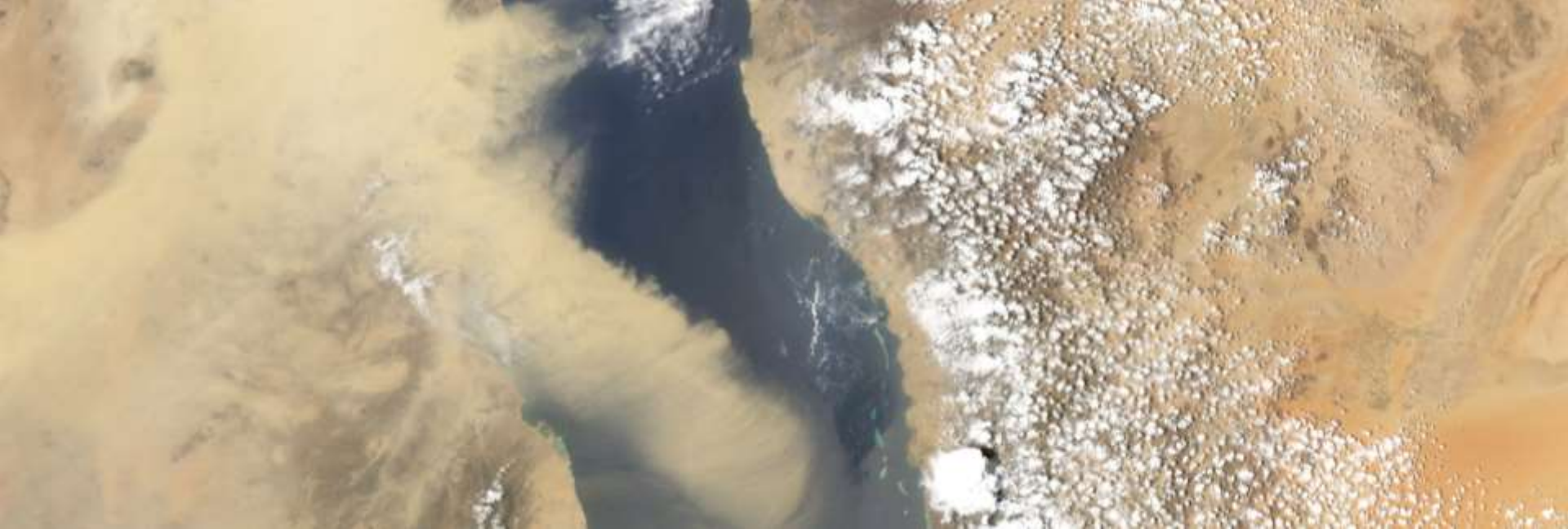
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Timeline

Call for author nominations	10 April – 21 May 2017
Selection of authors	9 July 2017
1 st Lead Author Meeting	16 - 20 October 2017
2 nd Lead Author Meeting	26 – 30 March 2018
First Order Draft Expert Review	4 June – 22 July 2018
3 rd Lead Author Meeting	3 - 7 September 2018
Second Order Draft Expert and Government Review	29 October - 23 December 2018
4th Lead Author Meeting	11 - 15 February 2019
Final Government Review of Summary for Policymakers (SPM)	22 April – 16 June 2019
IPCC acceptance/adoption/approval	2 - 8 September 2019



Thank you for your attention

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