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SIXTH ASSESSMENT REPORT (AR6) PRODUCTS

Outline of the Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

(Prepared by the Scientific Steering Committee for the Scoping of the Special Report)

(Submitted by the Secretary of the IPCC)

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1. Introduction

At its 43rd Session (Nairobi, Kenya, 11 – 13 April 2016), the IPCC Panel decided to prepare three Special Reports.

In Paragraph 3 of Decision IPCC/XLIII-6 on the Sixth Assessment Report Products - Special Reports - the Panel decided “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”.

In Paragraph 2 of Decision IPCC/XLIII-7 on the Sixth Assessment Report Products – Strategic Planning – the Panel decided “to consider the outline of the Special Report on climate change, desertification, land degradation, sustainable land management, food security and greenhouse gas fluxes in terrestrial ecosystems at the 45th Session of the IPCC in 2017”.

Thereafter, the Chair of the IPCC established a Scientific Steering Committee, chaired by Mr Youba Sokona, IPCC Vice-Chair, to undertake the scoping of the Special Report under the joint scientific leadership of Working Groups I, II, III and the Task Force on Inventories (TFI) with support from the Working Group III Technical Support Unit.

2. Scoping Meeting

A scoping meeting for the IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, was held in Dublin, Ireland, from 13-16 February 2017.

Participants were invited to discuss all aspects of the scope, outline, and contents of the report. The proposed outline for the Special Report was developed over the course of the scoping meeting. After intensive discussions within an iterative process between break-out-groups and plenary sessions, participants agreed on the structure presented in Annex I.

Scoping meeting participants discussed the title and agreed that it should capture the full Special Report mandate and be preceded by a shorter reference to facilitate communication. The proposed title, which was agreed upon in the final plenary session, is *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*.

3. Proposed content and structure of the Special Report

The proposed chapters and suggested number of pages, as well as the outline of chapter bullets, are presented in Annex I.

4. Time Schedule

A call for nominations of Coordinating Lead Authors (CLAs), Lead Authors (LAs) and Review Editors (REs) will be issued after the 45th Session of the IPCC in March 2017. Approval and acceptance of the Special Report is planned for the 50th Session of the IPCC in September 2019. In order to achieve this, the timetable for the Special Report is as follows:

10 April – 21 May 2017	Call for author nominations
9 July 2017	Selection of authors
9 - 13 October 2017	1st Lead Author Meeting
26 – 30 March 2018	2nd Lead Author Meeting
4 June – 22 July 2018	First Order Draft Expert Review
3 - 7 September 2018	3rd Lead Author Meeting
29 October - 23 December 2018	Second Order Draft Expert and Government Review
11 - 15 February 2019	4th Lead Author Meeting
22 April – 16 June 2019	Final Government Review of Summary for Policymakers (SPM)
2 - 8 September 2019	IPCC acceptance/adoption/approval

5. Provisional budget estimate

Activity	DC/EIT Support ¹	Additional Expenditure	Sub-total	Link to IPCC-XLIV/Doc. 2
LA 1	180,000 45 journeys	30,600	210,600	Annex 6
LA 2	180,000 45 journeys	30,600	210,600	Annex 6
LA 3	180,000 45 journeys	30,600	210,600	Annex 6
LA4	180,000 45 journeys	30,600	210,600	Annex 7
IPCC-50 ²	24,000 6 journeys	3,600	27,600	Annex 7
Total			870,000	

The IPCC Secretariat has developed budget implications based on the proposed outline with seven chapters, assuming chapter teams with a maximum of **15** authors and a maximum of 50% from developing countries (DC) and countries with economies in transition (EIT).

Budget 2017: assuming 1 Lead Author Meeting with 45 journeys of DC and EIT Lead Authors and Review Editors at 4,000- CHF per journey, plus 30,600- CHF for other meeting costs. A sub-total of 210,600 CHF will be needed from the IPCC Trust Fund in 2017.

¹ Budget Document IPCC-XLIV/Doc.2 used maximum of 45 DC/EIT Lead Authors and Review Editors

² This is a part of the overall budget for IPCC-50 for DC/EIT authors who will travel to the approval session of the Special Report

Budget 2018: assuming 2 Lead Author Meeting with 45 journeys each of DC and EIT Lead Authors and Review Editors at 4,000- CHF per journey plus 30,600- CHF for other meeting costs. A sub-total of 421,200 CHF will be needed from the IPCC Trust fund in 2018.

Budget 2019: assuming 1 Lead Author Meeting with 45 journeys for DC and EIT Lead Authors and Review Editors at 4,000 CHF per journey, plus 30,600 CHF for other meeting costs. A sub-total of 210,600 CHF will be needed from the IPCC Trust Fund in 2019.

The overall budget for IPCC-50 includes funds for a preparatory meeting with 6 DC and EIT CLAs and their participation in the IPCC WG Session to approve the Summary for Policymakers, plus 15% additional costs, 62,100 CHF.

Proposed outline of the special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

Title: 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

List of Contents

Front matter (2 pages)
 Summary for Policy Makers (~10 pages)
 Chapter 1: Framing and Context (~15 pages)
 Chapter 2: Land-Climate Interactions (~50 pages)
 Chapter 3: Desertification (~35-40 pages)
 Chapter 4: Land Degradation (~40 pages)
 Chapter 5: Food Security (~50 pages)
 Chapter 6: Interlinkages and Integrative Response Options (~40 pages)
 Chapter 7: Emergent Risks, Decision Making and Sustainable Development (~40 pages)
 Boxes, Case Studies and FAQs (~up to 20 pages)
 Total: up to 300

Chapter 1: Framing and Context (~15 pages)

- Socio-economic, biogeochemical, and biophysical interactions between climate change and desertification, land degradation, food security and GHG fluxes
- Land as a finite resource under climate change, current and additional demands
- The contribution of this report in relation to reports by IPCC and other relevant institutions
- Key concepts and definitions
- Treatment of uncertainties
- Integrated storyline of report, chapter narrative, sequence, linkages

Chapter 2: Land–Climate interactions (~50 pages)

- Climate change and variability that influence desertification, land degradation, food security, sustainable land management and GHG fluxes in terrestrial ecosystems
- Terrestrial GHG fluxes and related stocks: methods, status, trends, projections, and drivers
- Biophysical and non-GHG feedbacks and forcings on climate
- Consequences for the climate system of land-based adaptation and mitigation options, including negative emissions

Chapter 3: Desertification (~35-40 pages)

- 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 Attribution: distinguishing between climatic- and human-induced changes
- Desertification feedbacks to climate, including sand and dust storms
- Climate-desertification interactions, including past observations and future projections
- Impacts of desertification on natural and human systems in a changing climate
- Technological, socio-economic and policy responses to desertification under a changing climate including economic diversification, enabling conditions, co-benefits
- Hotspots and case-studies

Chapter 4: Land Degradation (~40 pages)

- 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, 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 for key socio-ecological systems
- Impacts of land degradation on natural and human systems in a changing climate
- Integrated higher-level responses, e.g. SLM (where possible related to the SDGs), including considerations of cost, incentives and barriers
- Hotspots and case-studies

Chapter 5: Food Security (~50 pages)

- Framing and Context: food and nutrition security (availability, access, utilization, stability), food system, farming systems including agroforestry, food-energy-water nexus, and the role of desertification and land degradation.
- Status, current trends and future projections of food and nutrition security linked to climate change, globally and regionally
- Attribution: distinguishing between climatic- and human-induced changes
- Impacts of climate change on food and nutrition security, including food production, prices and livelihoods
- Impacts of food and nutrition security on climate change
- Responses in terms of adaptation considering the full range of options, and their use
- GHG mitigation responses and their influence on food and nutritional security
- Synergies and trade-offs between adaptation and mitigation (considering scales, linkages, and co-benefits), sustainable land management
- Consequences of measures to enhance food and nutrition security for adaptation and mitigation in a changing climate
- Hotspots and case-studies

Chapter 6: Interlinkages and integrative response options (~40 pages)

- Combined and interactive effects between desertification, land degradation, food security and GHG fluxes, and scenarios
- Synergies/trade-offs/side-effects/co-benefits between response options including sustainable land management
- Impacts of land-based mitigation options on land degradation, desertification, food security, and ecosystems and their services
- Impacts of land-based adaptation options on land degradation, desertification, food security, and ecosystems and their services
- Land-based negative emissions
- Adaptation-mitigation interactions and co-benefits
- Competition for land

Chapter 7: Emergent risks, decision making, and sustainable development (~40 pages)

- Emergent risks from interaction of climate change with desertification, land degradation, and food security
- Management responses to areas of substantive risk arising from climate change
- Synergies and trade-offs of response options that affect sustainable development and climate change adaptation and mitigation
- Governance, institutions and decision-making across multiple scales that advance adaptation and mitigation, in the context of desertification, land degradation, food security and sustainable land management