# INTERGOVERNMENTAL PANEL ON Climate change

# FIFTY-SECOND SESSION OF THE IPCC Paris, France, 24 – 28 February 2020

IPCC-LII/INF. 6, Rev. 1 (20.II.2020) Agenda Item: 13.3 ENGLISH ONLY

# **PROGRESS REPORTS**

### Working Group III contribution to the Sixth Assessment Report

(Prepared by the Co-Chairs of Working Group III)

(Submitted by the Secretary of the IPCC)

# **PROGRESS REPORTS**

# Working Group III contribution to the Sixth Assessment Report

# 1. INTRODUCTION

The following is a report on the activities of Working Group III (WGIII) during the IPCC Sixth Assessment Report cycle since the 49<sup>th</sup> Session of the IPCC (IPCC-49) in May 2019. Recent key activities and meetings for WG III, in chronological order, have been:

- Participation in the 49<sup>th</sup> Session of the IPCC in Kyoto, Japan, May 2019.
- Attendance at the 50<sup>th</sup> Session of UNFCCC / SBSTA, Bonn, June 2019.
- 50<sup>th</sup> Session of the IPCC and the organisation of the approval of the Special Report on Climate Change and Land, Geneva, July 2019.
- Completion of the Zero Order Draft of the WG III contribution to the Sixth Assessment Report, July 2019.
- Second Lead Author Meeting for the WG III contribution to the IPCC Sixth Assessment Report, New Delhi, India, September 2019.
- Participation in the Second Joint Session of WG I and WG II for the approval/acceptance of the Special Report on Ocean and Cryosphere in a Changing Climate, Monte Carlo, Monaco, September 2019.
- Participation in the SYR Scoping Meeting, Singapore, October 2019.
- Participation at COP25, Madrid, December 2019.
- Completion of the First Order Draft of the WG III contribution to the Sixth Assessment Report, and making this available for expert review, January 2020.
- Preparation of the Third Lead Author Meeting for the WG III contribution to the IPCC Sixth Assessment Report, to be held in Quito, Ecuador in April 2020.
- Development of communications strategy for WG III contribution to the IPCC Sixth Assessment Report.

# 2. WORKING GROUP III ACTIVITIES

### 2.1 IPCC-50 and the approval of the Special Report on Climate Change and Land [July 2019]

Summer 2019 saw major engagement of the WG III Co-Chairs, Steering Committee (SC), Bureau members, London and India based Technical Support Unit (TSU) along with the Working Group I (WG I) and Working Group II (WG II) Co-Chairs and TSUs in the approval of the IPCC Special Report on Climate Change and Land (SRCCL) in Geneva, Switzerland, 29 July - 08 August 2019. This was a major cross-WG and cross-TSU effort. WG III co-ordinated activities during the premeeting for approval of the Summary for Policymakers (SPM) for drafting authors, SC and Bureau, author training, and discussions on the roadmap before the plenary. The Heads of TSU for WG III led the operational and scientific coordination for the approval plenary session in coordination with the SC and Co-Chairs. Six Chapter Scientists attended the meeting (four generously funded by the UK Government), providing support directly to the authors present.

The IPCC approved and accepted 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 at its  $50^{th}$  Session held on 2 – 7 August 2019. The approved Summary for Policymakers (SPM) was presented at a press conference on 8 August 2019. Numerous outreach activities have been undertaken in the period following approval.

# 2.2 AR6 Zero Order Draft [July 2019]

The period 22 July to 1 September 2019 saw the internal review of the Zero Order Draft (ZOD) of the WG III report. In total, 63 invited experts provided 2,104 comments. The author teams were asked to review all comments received and to take these into consideration in their writing of the First Order Draft.

WG III TSU summarised and analysed major topical issues across different chapters of ZOD which included mapping content wise linkages across chapters (cross-chapter linkages and narrative links across chapters), taking note of issues and limitations in particular chapters and any scientific terminologies to be categorised further under the glossary.

### 2.3 AR6, Second Lead Author Meeting (LAM2), New Delhi, India [September 2019]

WG III LAM2 was held from 29 September to 04 October 2019 in New Delhi, India. The meeting was hosted by the Ministry of Environment, Forest and Climate Change and was attended by more than 200 experts from 65 countries. Seventeen Chapter Scientists attended the Second Lead Author meeting in New Delhi (with the support of the UK Government).

LAM2 had several purposes: (i) to consider informal review comments on the Zero Order Draft, (ii) to start the process of preparing a First Order Draft of each chapter, (iii) to hold preliminary discussions on the report "storyline" and the Summary for Policymakers and (iv) to continue the processes started in the First Lead Author Meeting to identify and co-ordinate cross-cutting issues. Chapter meetings and plenary sessions were organised throughout the week, as well as meetings of chapter groups and break out groups to further advance discussions of cross-working group issues (including linkages between WG II and WG III contribution to the AR6 cycle).

WG II participants who attended included several WG II authors and WG II Co-Chair Debra Roberts. IPCC Vice-Chair Youba Sokona also attended. The cross-working group participants took part in plenaries, chapter meetings and breakout group discussions and led on informal meetings with Coordinating Lead Authors (CLAs) and authors.

In advance of LAM2, a survey was circulated to the Sixth Assessment Report (AR6) authors and review editors, government focal points, and IPCC Observer Organizations to help scope the Annex on Scenarios and Modelling Methods and to ensure that the Annex meets the needs of users and scenario builders. More than 200 responses were received. The TSU together with Lead Authors from Chapters 3 and 4 analysed the survey responses and this informed the discussions in LAM2.

The final afternoon of the meeting was dedicated to developing the structure and content of the WG III AR6 summary for policy makers. This discussion drew together the inputs from chapter teams and bureau members to develop a draft outline of the SPM which will be used to guide authors' future work on the first and second order draft.

Following the meeting, the TSU circulated an anonymous questionnaire asking for their feedback of the meeting. The results of this survey will inform the preparation of future meetings and record any barriers to participation (including external commitments, gender and being new to the IPCC). Participant's feedback was very positive. The recommendations for improvement included, the provision of more opportunities for self-organised chapter huddles and more time to foster cross-cutting interactions between chapters. The travel arrangements for authors paid for by the IPCC trust fund remains a cause of concern.

# 2.4 Synthesis Report Scoping Meeting, Singapore [October 2019]

WG III was pleased to support the IPCC Chair and the Steering Committee for the Synthesis Report (SYR-SC) in planning and delivering the scoping meeting. WG III Bureau participated as members of the SYR-SC assisting with the selection of participants and offering support to the IPCC Chair and Secretariat including practical options for the conduct of the meeting.

During the SYR scoping meeting WG III TSU supported both scientific and operational aspects of the meeting including breakout group support. WG III bureau and TSU co-ordinated with WG I & II in support of the preparation of the INF document.

### 2.5 COP 25, Madrid, Spain [December 2019]

WG III assisted the Secretariat communications team in organising and delivering a programme of outreach activities for the Special Report on Climate Change and Land. WG III held 5 events throughout COP on the Special Report on Climate Change and Land and the Sixth Assessment Report, these were:

- Land Emissions and the Global Stocktake (AR6)
- An Introduction to Climate Change and Land (SRCCL)
- Land Degradation and Desertification around the Globe (SRCCL)
- The Future Food System (SRCCL)
- Demand and Supply Side Policy (AR6)

A number of external guest speakers complemented the WG III TSU, Bureau and authors, as they delivered the above sessions. Guest speakers came from industry, business, NGOs, and government.

Aside from formal IPCC events, the IPCC Co-Chairs, TSU and authors presented at several pavilions, mostly on SRCCL and AR6. WG III also held a closed set of meetings with environmental NGOs (Climate Action Network) and business (International Chamber of Commerce) to kick-start engagement for AR6. These meetings sparked discussion on a series of themed webinars to be hosted in February-March 2020, and laid groundwork for further engagement at SBSTA 52.

COP25 was also the launching place for a new SRCCL Report Video. Developed by the three working groups and featuring a range of interviews with IPCC authors and TSU, this short film captures the key messages from the report in an accessible way for researchers, students, lay audiences and others. An SROCC video was also debuted at COP.

The 51<sup>st</sup> meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA 51) took place at COP25 and included a special joint event to unpack the new scientific knowledge and key findings in SRCCL (4 December). The session was broadcast online, and the complete presentation delivered by the Working Group Co-Chairs (Debra Roberts, Jim Skea, Panmao Zhai, Valérie Masson-Delmotte and Hans-Otto Pörtner) is available on the UNFCCC website.

### 2.6 AR6 First Order Draft [January 2020]

The first order draft of the WG III contribution to the AR6 was made available for expert review from the 13 January to 8 March 2020.

# 2.7 AR6 Third Lead Author Meeting, Quito, Ecuador [April 2020]

The Working Group III Third Lead Author Meeting will be held in Quito, Ecuador from 15 to 19 April 2020 and is generously hosted by the Ministry of Environment and the Government of Ecuador. The third meeting of CLAs and chapter teams will address the comments received during the expert review and focus on planning the work for the Second Order Draft and SPM. This meeting will also be attended for the first time by Review Editors who will be embedded within chapter teams. To help build on the cross-working group linkages that were established in LAM2 an invitation has been extended to WG I and II.

### 3. STAKEHOLDER ENGAGEMENT

WG III is convening a set of webinar-based workshops engaging authors and representatives from business and environmental NGOs in the lead up to the Third Lead Author Meeting. The webinars will be sector- and topic-based. The topics were identified following meetings with the Business and Industry NGOs (BINGOs) and Environmental NGOs (ENGOs) groups at COP 25. The webinars will allow authors to communicate plan for AR6 to stakeholders as well as providing opportunities for feedback.

# 4. COODINATION OF CROSS-WG TOPICS

Building on the successful collaboration between working groups developed over the course of the Special Reports, work is continuing to address scientific and production topics common to all three working groups. Areas of active co-ordination between WG include:

- Scenarios: WG III and WG I are leading a collaborative effort to co-ordinate the selection of scenarios across AR6 reports and ensure both consistent labelling and transparent interpretation.
- **Risk**: a guidance note has been developed is to promote a more consistent and transparent application of the concept of risk across Working Groups in the 6th Assessment Cycle and to provide the foundation for its use and possible further evolution in future assessment cycles.
- **Data management**: WG III is co-ordinating with WG I and TG-DATA to implement the FAIR principles for data management which aim to ensure essential data is findable, accessible, interpretable, and re-usable. The focus of this guidance will be datasets most relevant to the SPM and Technical summaries.
- **Glossary**: a glossary common to all products in the IPCC AR6 cycle is being developed across WG I, II & III. This aims to support the consistent use of definitions in IPCC reports, and to ensure that concepts treated in IPCC reports are understandable to all readers and users including policymakers and other audiences.
- Other cross-cutting issues: Work is ongoing to identify and co-ordinate the assessment of scientific literature that cuts across working group domains. These issues include: urban systems, land-use, sustainable development, regional groupings of countries.

WG III authors, bureau and TSU have participated in the expert reviews of WG I and II reports. WG III bureau and TSU have also participated in WG I & II meetings including:

- WG II Second Lead Author Meeting, Kathmandu, Nepal, July 2019.
- 51<sup>st</sup> Session of the IPCC and the approval of SROCC, Monaco, September 2019.
- WG II Third Lead Author Meeting, Portugal, January 2020.

# 5. WG III CONTRIBUTION TO TG-DATA

WG III TSU is setting up tailored processes and guidelines that aim to implement the recommendations of TG-Data on curation, traceability, stability, availability and transparency of data and scenarios related to the WG III contribution to AR6. Priority will be given to Summaries for Policymakers and Technical Summaries. Curation will cover input data, final data and executable codes for figures and tables using suitable platforms and software.

As a starting point, we are currently trialling the curation process of the Historical Emissions data of Chapter 2 of the WG III AR6 report. This process, alongside guidelines, will be rolled out to all chapters. Each chapter will have a data representative to coordinate the efforts of the chapter with the TSU. WG III TSU will provide graphics and data/code support interfacing with chapters' representatives. The aim is to have these processes and guidelines finalised during LAM 3.

The WG III AR6 scenarios database is hosted by the International Institute for Applied Systems Analysis (IIASA) in association with the Integrated Assessment Modelling Consortium (IAMC). IIASA is currently in the process of hosting the data on historical emissions for Ch. 2 and the related data for the Building chapter (Ch. 9) and Transport chapter (Ch. 10).

WG III TSU is participating in the wider TG-Data discussions on quality control and documentation requirements for the public release of codes that underpins figures in the IPCC assessment.

# 6. TECHNICAL SUPPORT UNIT

WG III is pleased to confirm that the Technical Support Unit will continue to benefit from the generous support of the UK Government through the Department of Business, Energy and Industrial Strategy. Funding for Years 5-7 of the AR6 cycle has been confirmed, representing continued support from the UK for the period 01 April 2016 to 31 December 2022.

### 7. COMMUNICATIONS & OUTREACH

Late 2019 and early 2020 has so-far focussed on the initiation of a new WG III communications strategy for AR6. WG III AR6 communications will build on what was established in SRCCL, considering what did or didn't work, and offering new methods and modes for communication. AR6 communications activity started at LAM2 in October 2019, where the scope of Working Group communications was introduced to authors/scientists and support was offered through a communications helpdesk. Outreach was also run at the India Habitat Centre with the Delhi Centre for Policy Research. LAM3 in April 2020 will build on activity at LAM2 and involve media training for authors, messaging sessions to shape communications advice as authors work further to communicate the report and work of the IPCC (including social media, figures and graphics, development of communications products - the authors handbook developed by WG I was established at LAM2).

Communications work will also overlap with the development of AR6 and engage with the report's Frequently Asked Questions (FAQs). Break Out Groups are intended for LAM3, where FAQ representatives from each chapter will work with the Science and Communications team to develop FAQs that are relevant to a wide audience and tie-in with the themes/topics of their chapters and messages of the report. This process began at LAM2 in New Delhi.

### 7.1 Outreach/Appearances

Throughout 2019 and into 2020 the WG III TSU, Bureau and Authors engaged in Outreach and Media Appearances. These were predominately around the Special reports on *Climate Change and Land* and *Global Warming of 1.5* °C, as well as the *Sixth Assessment Report*. Outreach took place

on all continents and was held in partnership with WG III, other Working Group, the IPCC Secretariat and/or external organizations. A non-exhaustive list includes interviews and articles in major news and online publications, talks that engaged with the general public and lay audiences, formal testimony to governments and parliaments, scientific presentations to academics and scientists, and meetings, presentations or dialogue with industry, business and non-governmental organizations.

The WG III Co-Chairs and the TSU science and communication teams are actively engaged in communicating the plans and work of SRCCL and the AR6 report. Outreach undertaken by WG III authors can be found in the <u>WG III newsletter</u> available on the IPCC website.