

Our ref.: 5346-19/IPCC/SRCCL

To designated IPCC Focal Points and
Ministries of Foreign Affairs (MFAs)
(if no focal point has been
designated)

COPY

Geneva, 25 October 2019

Subject: *IPCC Special Report on Climate Change and Land*

Sir/Madam,

Allow me to bring to your attention three errors found in the Summary for Policymakers (SPM) of the Special Report on Climate Change and Land (SRCCL). These errors were discovered after approval of the SPM at the 50th Session of the IPCC in Geneva, August 2019.

The errors which require correction are explained in **Annex 1** to this letter.

Appendix A to the Principles Governing IPCC Work, ANNEX 3 - IPCC Protocol for addressing possible errors in the IPCC Assessment Reports, Synthesis Reports, Special Reports and Methodology Reports (referred to below as "Error Protocol"), lays down the procedures to address alleged errors in the SPM of a Working Group Contribution (see Error Protocol Section 2, Step 5A). After agreeing that action on the alleged error is warranted, the Chairman of the IPCC, WGIII Co-Chairs and relevant authors have constructed an erratum statement. This erratum statement was approved by the IPCC WG I, WG II, WG III Bureau and the Co-Chairs of the TF.

The Error Protocol further stipulates: "Following WG or TF Bureau approval, the proposed erratum is submitted to the Panel for approval. To allow for rapid response, the Panel may delegate this approval step to the Executive Committee, which can decide that the erratum be posted on the IPCC and WG or TF websites, or can decide to defer to the next session of the IPCC Bureau or of the Panel."

The immediate correction of the error in the SPM described in Annex 1 would be highly desirable in order for the revised SPM to be ready for timely printing and before the Twenty fifth Session of the Conference of the Parties (COP 25) to the UNFCCC in Santiago (2-13 December 2019).

Consistent with the Error Protocol, we suggest using the option foreseen for rapid response for this error and I kindly ask for your agreement to delegate the approval of the proposed erratum to the IPCC Executive Committee.

I sincerely hope that you agree with the proposed way forward, which will enable us to print and distribute a fully accurate version of the SRCCL SPM. Unless we hear any objections by **Wednesday 30th October 2019, 10:00 a.m.** CET Geneva time, we will proceed as suggested.

A copy of this letter is being sent for information to the Ministry of Foreign Affairs and to the Permanent Representatives from your country to the World Meteorological Organization and to the United Nations Environment Programme.

Yours sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'C' followed by a small 'M' and a checkmark-like flourish.

(Abdalah Mokssit)
Secretary of the IPCC

ANNEX 1:

Special Report on Climate Change and Land Errata 31st October 2019)

SRCLL Summary for Policy Makers

In the text below red highlights the text which is to be corrected. Yellow highlights the corrected text.

Table SPM 1 Panel 1 & 2

Minor adjustments are required to values in the table to ensure consistency in giving values to a consistent number of significant figures and to correct rounding errors. Correcting these errors does not change the overall calculation.

Table SPM 1 Panel 1 & 2 (subject to copy editing and trickle backs) as approved:

Table SPM1. Net anthropogenic emissions due to Agriculture, Forestry, and other Land Use (AFOLU) and non-AFOLU (Panel 1) and global food systems (average for 2007-2016) ¹ (Panel 2). Positive value represents emissions; negative value represents removals.									
		Direct Anthropogenic							
		Net anthropogenic emissions due to Agriculture, Forestry, and Other Land Use (AFOLU)			Non-AFOLU anthropogenic GHG emissions ⁶	Total net anthropogenic emissions (AFOLU + non-AFOLU) by gas	AFOLU as a % of total net anthropogenic emissions, by gas	Natural response of land to human-induced environmental change ⁷	Net land – atmosphere flux from all lands
Panel 1: Contribution of AFOLU									
		FOLU	Agriculture	Total					
		A	B	C = B + A	D	E = C + D	F = (C/E)*100	G	A + G
CO ₂ ²									
	Gt CO ₂ y ⁻¹	5.2 ± 2.6	-- ¹¹	5.2 ± 2.6	33.9 ± 1.8	39.1 ± 3.2	~13%	-11.2 ± 2.6	-6.0 ± 2.0
CH ₄ ^{3,8}									
	Mt CH ₄ y ⁻¹	19 ± 6	142 ± 43	162 ± 48.6	201 ± 100	363 ± 111			
	Gt CO ₂ e y ⁻¹	0.5 ± 0.2	4.0 ± 1.2	4.5 ± 1.4	5.6 ± 2.8	10.1 ± 3.1	~44%		
N ₂ O ^{3,8}									
	Mt N ₂ O y ⁻¹	0.3 ± 0.1	8 ± 2	8.3 ± 2.5	2.0 ± 1.0	10.4 ± 2.7			
	Gt CO ₂ e y ⁻¹	0.09 ± 0.03	2.2 ± 0.7	2.3 ± 0.7	0.5 ± 0.3	2.8 ± 0.7	~82%		
Total (GHG)	Gt CO ₂ e y ⁻¹	5.8 ± 2.6	6.2 ± 1.4	12.0 ± 3.0	40.0 ± 3.4	52.0 ± 4.5	~23%		
Panel 2: Contribution of global food system									
		Land-use change	Agriculture		Non-AFOLU ⁹ other sectors pre- to post-production	Total global food system emissions			
CO ₂ ⁴ Land-use change	Gt CO ₂ y ⁻¹	4.9 ± 2.5							
CH ₄ ^{3,8,9} Agriculture	Gt CO ₂ e y ⁻¹		4.0 ± 1.2						
N ₂ O ^{3,8,9} Agriculture	Gt CO ₂ e y ⁻¹		2.2 ± 0.7						
CO ₂ other sectors	Gt CO ₂ y ⁻¹				2.4 – 4.8				
Total (CO ₂ e) ¹⁰	Gt CO ₂ e y ⁻¹	4.9 ± 2.5	6.2 ± 1.4		2.4 – 4.8	10.7 – 19.1			

Table SPM 1 Panel 1 & 2 corrected:

Table SPM1. Net anthropogenic emissions due to Agriculture, Forestry, and other Land Use (AFOLU) and non-AFOLU (Panel 1) and global food systems (average for 2007-2016) ¹ (Panel 2). Positive value represents emissions; negative value represents removals.										
Direct Anthropogenic										
Gas	Units	Net anthropogenic emissions due to Agriculture, Forestry, and Other Land Use (AFOLU)			Non-AFOLU anthropogenic GHG emissions ⁶	Total net anthropogenic emissions (AFOLU + non-AFOLU) by gas	AFOLU as a % of total net anthropogenic emissions, by gas	Natural response of land to human-induced environmental change ⁷	Net land – atmosphere flux from all lands	
Panel 1: Contribution of AFOLU										
		FOLU	Agriculture	Total						
		A	B	C = A + B	D	E = C + D	F = (C/E) *100		G	A + G
CO ₂ ²	Gt CO ₂ y ⁻¹	5.2 ± 2.6	No data ¹¹	5.2 ± 2.6	33.9 ± 1.8	39.1 ± 3.2	13%		-11.2 ± 2.6	-6.0 ± 3.7
	Mt CH ₄ y ⁻¹	19.2 ± 5.8	142 ± 42	161 ± 43	201 ± 101	362 ± 109				
CH ₄ ^{3, 4}	Gt CO ₂ e y ⁻¹	0.5 ± 0.2	4.0 ± 1.2	4.5 ± 1.2	5.6 ± 2.8	10.1 ± 3.1	44%			
	Mt N ₂ O y ⁻¹	0.3 ± 0.1	8.3 ± 2.5	8.7 ± 2.5	2.0 ± 1.0	10.6 ± 2.7				
N ₂ O ^{2, 5}	Gt CO ₂ e y ⁻¹	0.09 ± 0.03	2.2 ± 0.7	2.3 ± 0.7	0.5 ± 0.3	2.8 ± 0.7	81%			
	Total (GHG)	Gt CO ₂ e y ⁻¹	5.8 ± 2.6	6.2 ± 1.4	12.0 ± 2.9	40.0 ± 3.4	52.0 ± 4.5	23%		
Panel 2: Contribution of global food system										
		Land-use change	Agriculture		Non-AFOLU ⁸ other sectors pre- to postproduction	Total global food system emissions				
CO ₂ (land-use and land-use change) ⁴	Gt CO ₂ e y ⁻¹	4.9 ± 2.5								
CH ₄ Agriculture ^{5, 12, 13}	Gt CO ₂ e y ⁻¹		4.0 ± 1.2							
N ₂ O Agriculture ^{5, 12, 13}	Gt CO ₂ e y ⁻¹		2.2 ± 0.7							
CO ₂ (other sectors) ⁹	Gt CO ₂ e y ⁻¹				2.6 – 5.2					
Total ¹⁰	Gt CO ₂ e y ⁻¹	4.9 ± 2.5	6.2 ± 1.4		2.6 – 5.2	10.8 – 19.1				

SRCL SPM Section A Bullet A2.8.

Correction to clarify the nature of the studies used to assess climate change effects on yields compared to yields without climate change.

A2.8 as approved:

“In many lower-latitude regions, yields of some crops (e.g., maize and wheat) have declined, while in many higher-latitude regions, yields of some crops (e.g., maize, wheat and sugar beets) have increased over recent decades (high confidence).”

A2.8 corrected:

“Studies that separate out climate change from other factors affecting crop yields have shown that yields of some crops (e.g., maize and wheat) in many lower-latitude regions have been affected negatively by observed climate changes, while in many higher-latitude regions, yields of some crops (e.g., maize, wheat, and sugar beets) have been affected positively over recent decades (high confidence). “

Figure SPM3 - Panel B Biochar description

Paragraph incorrectly refers to afforestation and energy crops

Figure SPM3 - Panel B Biochar description as approved:

“High level: Impacts on adaptation, desertification, land degradation and food security are maximum potential impacts assuming implementation of **afforestation** at a scale of 6.6 GtCO₂yr⁻¹ removal {6.4.1.1.3}. Dedicated **energy crops** required for feedstock production could occupy 0.4–2.6 Mkm² of land, equivalent to around 20% of the global cropland area, which could potentially have a large effect on food security for up to 100 million people {6.4.5.1.3}.”

Figure SPM3 - Panel B Biochar description corrected:

“High level: Impacts on adaptation, desertification, land degradation and food security are maximum potential impacts assuming implementation of **biochar** at a scale of $6.6 \text{ GtCO}_2 \text{ yr}^{-1}$ removal {6.4.1.1.3}. Dedicated **biomass** crops required for feedstock production could occupy $0.4\text{--}2.6 \text{ Mkm}^2$ of land, equivalent to around 20% of the global cropland area, which could potentially have a large effect on food security for up to 100 million people {6.4.5.1.3}.”