



## Science Panel for the Congo Basin

# The Science Panel for the Congo Basin: Its Mission, Members, and Approach Strategic Partner Update (October 2024)

## WHAT is the Panel and its mission?

The **Science Panel for the Congo Basin (SPCB)** is the first-of-its kind independent scientific panel dedicated to synthesizing the existing scientific knowledge of the Congo Basin and central African forests, its status, and threats to its ecosystems.

The Congo Basin holds Earth's **second-largest tropical forest region** in both size and species diversity,<sup>1</sup> extending across 4 million square kilometers and hosting over 400 species of mammals, 1,000 species of birds, 1,200 species of fish, and 10,000 species of vascular plants.<sup>2</sup> The Basin provides food and water for over 120 million people<sup>3</sup> who rely on it for their livelihoods and socioeconomic subsistence, in addition to other ecosystem services that help regulate the global climate and sequester nearly 1.5 billion tons of carbon every year.<sup>4,5</sup>

Despite its critical role in supporting regional communities and global environmental stability, the Basin **remains largely under-researched**.<sup>6</sup> As scientific knowledge gaps hinder sustainable development, expanding anthropogenic activities threaten the Congo Basin's viability.<sup>7</sup> A better understanding of the existing science, remaining **knowledge gaps, potential risks, and tipping points** in the Congo Basin is needed to inform policy makers at national, regional and global levels.



The scope of the Panel and its composition covers the Congo Basin with its main ecosystems

<sup>1</sup> Harrison, Ian J., et al. "(PDF) Congo River Basin." *ResearchGate*, 2016, [www.researchgate.net/publication/311154427\\_Congo\\_River\\_Basin](http://www.researchgate.net/publication/311154427_Congo_River_Basin).

<sup>2</sup> Ibid

<sup>3</sup> Muvundja, Fabrice A., et al. "Rivers of the Congo Basin in Central Africa." *Afrotropical Streams and Rivers*, 2025, pp. 101–127, <https://doi.org/10.1016/b978-0-443-23898-7.00005-1>.

<sup>4</sup> Tourian, M.J., Papa, F., Elmi, O. et al. Current availability and distribution of Congo Basin's freshwater resources. *Commun Earth Environ* **4**, 174 (2023). <https://doi.org/10.1038/s43247-023-00836-z>

<sup>5</sup> "Critical Ecosystems: Congo Basin Peatlands." *UNEP*, 27 Feb. 2023, [www.unep.org/news-and-stories/story/critical-ecosystems-congo-basin-peatlands#:~:text=The%20peat%20swamp%20forest%20of%20the%20Congo,tens%20of%20carbon%20dioxide%20a%20year%20.&text=Peatlands%20store%20twice%20as%20much%20carbon%20as,they%20are%20under%20increasing%20pressure%20from%20development](http://www.unep.org/news-and-stories/story/critical-ecosystems-congo-basin-peatlands#:~:text=The%20peat%20swamp%20forest%20of%20the%20Congo,tens%20of%20carbon%20dioxide%20a%20year%20.&text=Peatlands%20store%20twice%20as%20much%20carbon%20as,they%20are%20under%20increasing%20pressure%20from%20development).

<sup>6</sup> Malhi, Yadvinder, et al. "African rainforests: Past, present and future." *Philosophical Transactions of the Royal Society B: Biological Sciences*, vol. 368, no. 1625, 5 Sept. 2013, p. 20120312, <https://doi.org/10.1098/rstb.2012.0312>.

<sup>7</sup> Muvundja, Fabrice A., et al. "Rivers of the Congo Basin in Central Africa." pp. 101–127.

## WHAT is the timeline for work of the Panel?

**The Science Panel for the Congo Basin was established in late 2023** to mobilize scientists from the region and global partners to jointly address these challenges, inspired by the call of environment ministers and scientists across the region for renewed efforts for increased scientific investment and involvement of science in policy making for the sustainable development of Congo Basin countries.<sup>8</sup> Led by and comprised of leading scientists in and from the region, the Panel is undertaking a comprehensive synthesis of the available scientific knowledge on the Congo Basin. The assessment will also draw from the knowledge of Indigenous peoples and autochthonous communities in the region, to generate a high-quality independent 2025 Congo Basin Assessment Report to be presented at COP30 in Belém, Brazil.



*Members of the SPCB Scientific Steering Committee and Lead Authors met in Nairobi in July 2024*

The Science Panel is closely coordinating with existing regional initiatives such as the Congo Basin Forest Partnership (CBFP) and supports related activities like the periodic *State of the Forests* reports facilitated by the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and others. In addition, the SPCB has been collaborating from the beginning with the Congo Basin Science Initiative (CBSI) to promote and mobilize investments in regional science and innovation. Regular consultations with institutions like COMIFAC and CAFI will continue to be central to the Panel's outreach and communications throughout 2025.

### Panel timeline to date

**February 2023:** Scientists from the region met in Libreville and agreed to form two regional science initiatives: the SPCB and the Congo Basin Science Initiative.

**September 2023:** A core team met in Brazzaville to agree on the Panel's mission, governance, and Co-Chairs.

**December 2023:** The Science Panel was launched at COP28, hosted by COMIFAC.

**February 2024:** The Panel Co-Chairs convened the Scientific Steering Committee with 24 members.

**July 2024:** First in-person meeting of the Scientific Steering Committee and lead authors in Nairobi.

**September 2024:** Writing teams of more than 100 panel authors begin joint work to develop the 2025 Assessment Report.

**October 2024:** SPCB involvement and consultations at COP16 (Cali) under the UN Convention on Biodiversity (CBD).

### Panel outlook

**June 2025:** External reviews of the draft Assessment Report, dialogue and close consultations with partners.

**September 2025:** Finalization of the panel's 2025 Assessment Report

**November 2025:** Presentation to policy leaders at COP30 in Belém, Brazil.

<sup>8</sup> White, Lee J. T., et al. "Congo Basin Rainforest - Invest US\$150 Million in Science." *Nature News*, Nature Publishing Group, 20 Oct. 2021, [www.nature.com/articles/d41586-021-02818-7](https://www.nature.com/articles/d41586-021-02818-7).

## HOW does the Panel operate?

### Structure and governance of the Science Panel for the Congo Basin

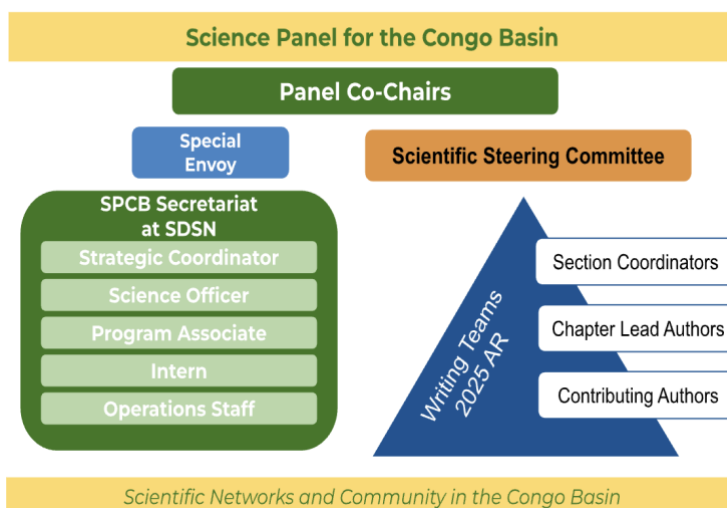
As an independent panel of scientists, convened and hosted by the Sustainable Development Solutions Network (SDSN), the SPCB represents a voluntary self-governed initiative with its own structures and processes.

Led by three eminent researchers from the region acting as Co-Chairs, the Panel is

supported by a Special Envoy; a Scientific Steering Committee; and a group of lead and contributing authors jointly developing the 2025 Assessment Report, the Panel's main deliverable, by November 2025.

The writing process involves dedicated teams of Section Coordinators, Lead Authors, and individual contributing authors, all of them supported by an experienced Science Officer based in Kinshasa. The Co-Chairs, SSC, and AR report structures are serviced by a small secretariat hosted by the SDSN, involving staff based in New York, Kinshasa, and Paris, with a Strategic Coordinator and a dedicated Science Officer.

The Panel is convened by Professor Jeffrey Sachs, President of the SDSN. With the support of the Panel's many partners in the UN and academia, and other institutions, working to advance science in and across Earth's tropical forest regions, the Panel is dedicated to building and contributing to a broader community of scientists in and of the region.



### Panel Co-Chairs and members of the Scientific Steering Committee

Last Name	First Name	Affiliation	Country
Koutika	Lydie-Stella (Co-Chair)	Research Center on Productivity and Sustainability of Industrial Plantations (CRDPI)	ROC
Sonké	Bonaventure (Co-Chair)	University of Yaoundé I	CAM
Tshimanga	Raphaël (Co-Chair)	University of Kinshasa	DRC
Inogwabini	Bila-Isia	University of Kinshasa	DRC
Abernethy	Kate	University of Stirling	UK
Averti Ifo	Suspense	Mariem Ngouabi University	ROC
Braun	Jean-Jacques	Institut of Research for Development (IRD)	FRA/GAB
Doucet	Jean-Louis	University of Liège	BEL
Fero	Maximiliano	National University of Equatorial Guinea	EQG
Lebamba	Judicaël	Masuku University of Science and Technology	GAB
Lewis	Simon	University of Leeds	UK
Longandjo	Georges-Noel	Institut Supérieur des Techniques Appliquées	DRC
Malhi	Yadvinder	University of Oxford	UK
Maniatis	Danae	Central African Forest Initiative (CAFI), University of Oxford	ITA
Moukandi	Guy	University of Mariem Ngouabi	ROC
Ngomanda	Alfred	National Center for Scientific and Technological Research (CENAREST)	GAB

## WHO is involved in the Panel?

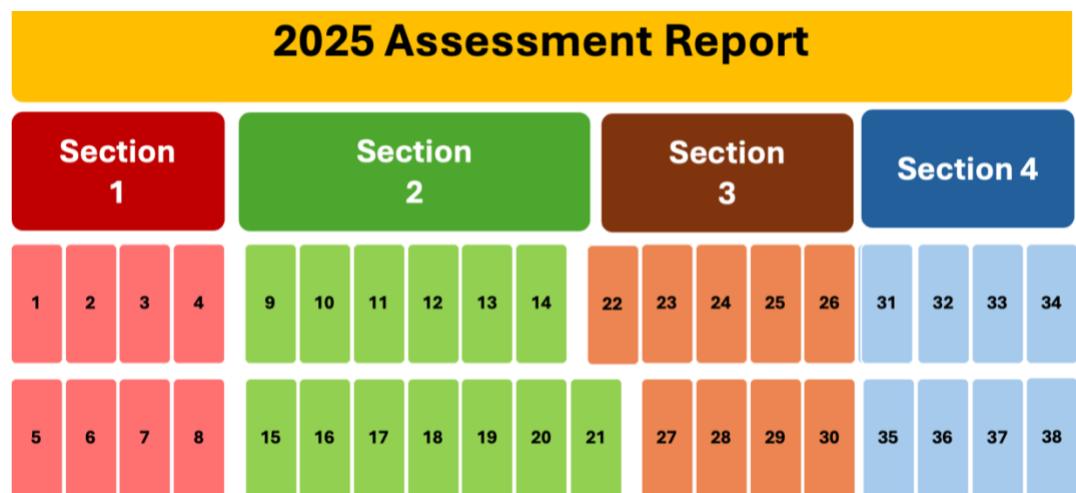


**WHAT  
will the Panel  
produce and  
how?**

Last Name	First Name	Affiliation	Country
Nguimalet	Cyriaque-Rufin	University of Bangui	CAR
Palla	Florence	Central Africa Forests Commission (COMIFAC)	CAM
Pokam	Wilfried	University of Yaoundé I	CAM
Semeki	Jean	University of Kinshasa	DRC
Ngabinzeke			
Sigaud	Marie	National Museum of Natural History	FR
Sonwa	Denis	World Resources Institute (WRI), Center for International Forestry Research (CIFOR)	CAM
Temgoua	Lucie	University of Dschang	CAM
Van Vliet	Nathalie	Center for International Forestry Research (CIFOR)	COL

### The 2025 Congo Basin Assessment Report

The 2025 report will be the primary product of the Panel to provide policy makers with an up-to-date assessment and synthesis of relevant research of the Congo Basin, to identify gaps and challenges as well as define opportunities for local and regional solutions, investments, and collaboration to accelerate progress on nature conservation and sustainable development for the countries of the region, communities, and people.



The structure and framework of the 2025 Assessment Report was developed by a core team of leading scientists in the region. It was adopted by the Scientific Steering Committee during an in-person meeting in Nairobi in July 2024.

The report framework organizes the work of Panel authors under four inter-related and linked sections, with a total of 38 individual chapters, with possible additions later in the process. Its sections will focus on:

- SECTION 1** How Congo Basin ecosystems function regionally and influence the changing earth system
- SECTION 2** The Impact of global, regional, and local human activity in the Congo Basin ecosystems
- SECTION 3** Prospective biodiversity, ecosystems and climate of the Congo Basin
- SECTION 4** How scientific data can inform climate-resilient sustainable land-use to address poverty and achieve other sustainable development goals across the region.

**WHAT  
will be the  
scope and focus  
of the 2025  
Assessment  
Report?**

The writing teams currently involve more than 40 lead authors from across all countries of the Congo Basin, as well as collaborators and experts from institutions outside of the region. In total, more than 150 authors are expected to be involved in this work, in addition to a wide range of external reviewers with expertise in the region, and a wide range of accompanying public consultations.

The final **2025 Assessment Report** will be presented to governments, global and regional institutions, and the broader global audience at COP30, the 30<sup>th</sup> conference of parties under the UNFCCC in Belém, Brazil.

### Timeline for the assessment



## HOW to get in touch or involved as a scientist or partner?

### Consultations and involvement in public events in 2024

In parallel to the work of the Panel in the coming 10 months, primarily on the 2025 Assessment Report, its Co-Chairs and Secretariat will keep reaching out to consult and coordinate with many other partners and institutions. This includes public meetings and presentations in the framework of existing global and inter-regional institutions and processes.

In 2024, this included active involvement in the biodiversity and climate Conferences of Parties (COPs) in Cali, Colombia (CBD), and in Baku, Azerbaijan (UNFCCC). In 2025 the Panel will continue to explore and prioritize regional opportunities to engage with organizations and frameworks like the Commission of Central African Forests (COMIFAC), the Congo Basin Forest Partnership (CBFP), Central African Forest Initiative (CAFI), and others for consultations with governments, civil society, and academia.



### How does the Panel ensure collaboration and synergy with other ongoing initiatives?

Since its start, the Panel has been closely consulting with other initiatives to ensure through its Co-Chairs, Scientific Steering Committee, and Special Envoy that the Panel's mission and work, especially the 2025 Assessment Report, complement existing initiatives and publications like the *State of the Forests* and related reports under the Central Africa Forest Observatory (OFAC).

**The SPCB is working in synergy with the Congo Basin Science Initiative (CBSI) and** actively coordinates with a range of other initiatives and institutions in the region. CBSI is an independent scientist-led platform that promotes long-term investment in science in the Congo Basin. Its mission is to transform our understanding of the world's second largest extent of tropical forest, build scientific capacity in the region, and use this knowledge to support sustainable development. To learn more about CBSI, see their webpage at [www.congobasinscience.net](http://www.congobasinscience.net)

The conclusions of the 2025 Assessment Report will directly feed into the work of CBSI and other efforts to address acute research gaps and priorities.

## Frequently asked questions

### What institutional status does the SPCB have?

The Panel is an independent scientific initiative convened and hosted by the SDSN as an independent non-governmental organization and global network that comprises over 2,000 universities and research organizations. The Secretariat is overseen by Emma Torres, Strategic Coordinator of the SPCB.



The formal launch of the Science Panel took place on December 3<sup>rd</sup> 2023, in Dubai at COP28, in the presence of many partners, delegates, and scientists, hosted by the COMIFAC pavilion

**Strategic Coordinator**  
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**SDSN Office, Paris**  
Cecil Haverkamp

[info@spcongobasin.org](mailto:info@spcongobasin.org)

### HOW and WHO to contact at the SPCB Secretariat?

Website of the Science Panel @ [www.SPCongoBasin.org](http://www.SPCongoBasin.org)



The Science Panel for the Congo Basin (SPCB) was launched on 3rd December 2023, at COP28 in Dubai. The SPCB is an independent platform for scientists from the region to synthesize the existing knowledge including Indigenous peoples and autochthonous knowledge, on the functioning of, and threats to, the Congo Basin and its ecosystems. More information about the Panel is detailed in the below press release.

► [PRESS RELEASE FOR THE LAUNCH OF THE SCIENCE PANEL](#)

► [PRESS RELEASE: PROFESSOR LEE WHITE, APPOINTED AS SPECIAL ENVOY TO THE SCIENCE PANEL FOR THE CONGO BASIN](#)

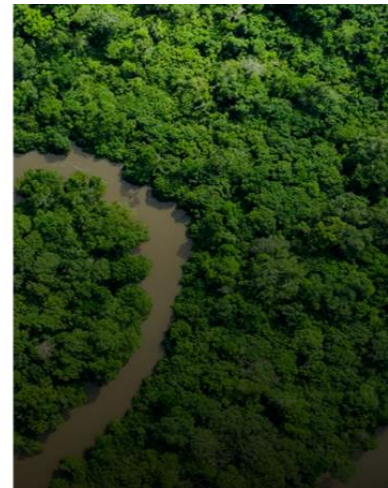
► [ABOUT THE SCIENCE PANEL FOR THE CONGO BASIN](#)

► [THE TEAM](#)

► [SPECIAL ENVOY](#)

► [THE SECRETARIAT](#)

For any questions or to express your interest in getting involved with the Science Panel for the Congo Basin, please email [info@spcongobasin.org](mailto:info@spcongobasin.org).



**SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK**  
A GLOBAL INITIATIVE FOR THE UNITED NATIONS

The Science Panel for the Congo Basin is convened under the auspices of the United Nations Sustainable Development Solutions Network (UNSDSN).

For more information, visit [www.unsdnsn.org](http://www.unsdnsn.org).