



GEF/STAP/C.68/Inf.01  
December 2, 2024

---

68<sup>th</sup> GEF Council Meeting  
December 16 – 20, 2024  
Virtual Meeting

**REPORT OF THE CHAIR OF THE SCIENTIFIC AND TECHNICAL ADVISORY PANEL  
TO THE 68TH GEF COUNCIL MEETING**

# Report of the Chair of the Scientific and Technical Advisory Panel to the 68<sup>th</sup> GEF Council Meeting

December 2024

**STAP**

SCIENTIFIC AND TECHNICAL  
ADVISORY PANEL

*An independent group of scientists that advises  
the Global Environment Facility*



# Report of the Chair of the Scientific and Technical Advisory Panel to the 68th GEF Council Meeting

## Table of Contents

- 1. Introduction..... 1
- 2. STAP’s initial perspective on GEF-9 ..... 1
- 3. Other recent reports ..... 7
- 4. Other STAP activities ..... 8
- 5. STAP Panel member updates ..... 10

### 1. Introduction

This report provides an update on the work of the Scientific and Technical Advisory Panel (STAP) to the Global Environment Facility (GEF) since the 67th GEF Council meeting in June 2024. It summarises key findings from STAP reports, on STAP’s initial thoughts and advice as the GEF prepares for its ninth replenishment (GEF-9), and STAP’s information notes on community-based approaches, and on clarifying risks in GEF projects. It also presents STAP activities in the GEF Partnership in the past six months and provides STAP panel member updates.

### 2. STAP’s initial perspective on GEF-9

In preparation for drafting this initial perspective, STAP held a two-day workshop in June, which brought together more than 40 experts from diverse fields to discuss three themes: a “whole of society” approach, policy coherence, and transformational change. This in-person workshop was preceded by six virtual consultations held in April and May, three each in the eastern and western hemispheres, exploring the same three themes.

The paper [STAP’s initial perspective on GEF-9](#) reviews the implication of current global trends and the context for future GEF investments, presents strategic requirements that the GEF could deploy to enhance its contributions to catalysing transformation in key global systems, and offers STAP’s recommendations for implementing these strategies. Four important priorities need to be addressed with clearly defined pathways: embracing innovation and risk; advancing policy coherence; emphasising the role of civil society; and influencing private sector financial flows. The paper underscores the importance of working in partnership with others, including other funders, and being strategic in seeking to influence and reinforce action by governments, the private sector, and civil society.

The paper makes seven recommendations for translating these strategic priorities into practice.

- 1. Build an overarching GEF-9 theory of change to drive portfolio-wide investment** that shows how the GEF can contribute to transformation in selected priority systems.

The overall GEF-9 theory of change should provide coordination across all levels of the GEF's operations and focus on transformation in a few systems to avoid spreading effort too thinly and diluting impact; key systems might include food, cities, and forest biomes. Within each system, priority goals should be identified and the logic explained for reaching the desired transformations, with reinforcing contributions from other Integrated Programs and focal areas. Investing in cross-cutting capabilities – for example, knowledge management and learning, communications, and external partnerships – can help create action towards positive tipping points.

The theory of change should identify levers for system transformation to be applied across the GEF portfolio. The GEF-8 theory of change had four primary levers: governance and policies, financial leverage, multi-stakeholder dialogue, and innovation and learning. In GEF-9, these levers could be refined and additional levers identified to catalyse transformation; examples of such levers include capacity strengthening, communication and information dissemination, and behavioural change. For each lever there should be an explanation of what it entails and its role in GEF investment. This would provide a common design framework for applying these levers in theories of change for each Integrated Program and focal area and would identify the roles of different actors in the GEF Partnership.

GEF-9 programming decisions should reflect a clear and critical analysis of how current Integrated Programs and other parts of the GEF-8 portfolio are performing to inform how the strategy would evolve in GEF-9 and beyond.

- 2. Invest in innovation and manage associated risk at the portfolio and program levels** by identifying problems that could be solved through innovation, commissioning solutions from diverse sources, and embedding innovation in the design cycle.

The GEF Risk Appetite shows that the GEF Council has a high appetite for innovation risks taken in pursuit of transformational change and signals an important shift in expectations.

The GEF-9 strategy should clearly define the GEF's role in delivering and adopting innovative solutions in the portfolio- and program-level theories of change. It should be explicit about the problems in need of innovation, the process for bringing in innovative ideas, and how the uptake and scaling of proven solutions will be encouraged. It should pay particular attention to innovation that can contribute to the enabling conditions needed to move towards positive tipping points.

Innovation priorities should be embedded in the program design cycle. Piloting, testing, and then scaling solutions may involve sequential projects, perhaps transitioning to new sources of long-term financing, including from external partners.

The GEF-9 strategy should indicate how the different funding modalities (including the windows for innovation, and policy coherence, the blended finance program, and the Small Grants Program) will be coordinated to enable greater innovation, how innovation risks will be managed, and how these funding windows and programs will support higher-risk investments that are directly aligned with the quantified transformation goals of the Integrated Programs.

**3. Support policy coherence at multiple levels**, including having a clear definition of policy coherence that emphasises environmental outcomes, strengthening its application by supporting dialogue processes, and through Country Engagement Strategies, and interministerial and intersectoral coordination.

The GEF should strengthen policy coherence by supporting policy dialogue, design, and alignment, while incorporating transparency and civic engagement. Policy coherence can bolster the links between environmental progress, economic development, and social stability. Working in partnership with international agencies, such as the World Bank and regional development banks, will extend the GEF's influence and enable it to engage with multiple sectors.

The GEF-9 strategy should consider how GEF project design and funding can contribute to policy coherence through interministerial and intersectoral coordination at country and subnational levels.

For example, interministerial committees have been deployed by countries to address cross-cutting priorities, such as investment in the blue economy, in a more integrated way.<sup>1</sup> And an intersectoral approach could accelerate place-based policy coherence, for example in river basins, coastal zones, or urban corridors.

Country Engagement Strategies and national dialogues can support countries in developing policy coherence both vertically (from the local scale to national and regional scales) and horizontally (across sectors) in relation to global environmental benefits (GEBs), including support for knowledge, capacity, and learning systems that can bolster collaboration among policy stakeholders.

**4. Enable civil society to strengthen the social foundations for transformation** by enhancing the role of civil society within project design and prioritising civil society capacity strengthening.

The GEF has begun to use a “whole of society” framing, which includes a greater commitment to civil society. This commitment could include supporting civil society roles in demonstrating institutional innovation (such as community-based marine protection networks or accountability mechanisms to track the outcome of climate adaptation projects); advancing new social and cultural norms (such as choosing reusable items, reducing fast fashion, and embracing cycling, walking, and public transport to reduce environmental impacts); and deepening societal demand for policy reform (such as building urban support for mechanisms to pay for upstream ecosystem services).

---

<sup>1</sup> Ratner, B. D., Gorsevski, V. B. & Israel-Meyer, N. (2022). The GEF and the Blue Economy. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. <https://www.stagef.org/resources/advisory-documents/gef-and-blue-economy>.

More engagement of civil society can bring in diverse knowledge and perspectives that can improve the legitimacy and durability of GEF investments. Often the most effective strategies for engaging civil society entail strengthening, supporting, or addressing gaps in existing multi-stakeholder initiatives. In addition to supporting action, the capacity of civil society needs to be strengthened.

Indigenous Peoples have made major contributions to conserving biodiversity and to impeding deforestation, forest degradation, fragmentation, and to food security. Empowering Indigenous Peoples to defend their territorial rights and manage biodiversity, for example, can result in more sustained and cost-effective protection and help maintain ecosystem services.

The role of civil society in project design should be strengthened. Examples of how this could be done include seeking early input from civil society on priorities before project identification; gauging civil society preferences among a menu of project options; incorporating civil society networks into project design processes; and tapping into local expert advisory groups to assess and address risks and opportunities.

**5. Work to influence market transformation in targeted sectors** by strengthening the national policy and regulatory context for private sector investment, ensuring that blended finance projects equally emphasise environmental and finance benefits, and working more closely with other financing agencies with greater influence.

The GEF-9 strategy should influence the incentives for the private sector to contribute to positive environmental outcomes and reduce environmental harm. Given the finance required for societal transitions to sustainability in low- and medium-income countries, private sector decision-making is pivotal, particularly in the finance sector and among large enterprises, both international and domestic.

For blended finance investments, the environmental logic for delivering GEBs and scaling should have the same importance as the financial logic. There needs to be a clear, integrated logic by which blended finance investments will deliver GEBs at the same time as generating a financial return. Mechanisms need to be put in place to enable more rapid learning across blended finance investments, including systematising this learning and making it available to other financial actors.

Influencing market transformation requires strengthening the national policy and regulatory context for private investment. Many countries need capacity support to attract more private finance. Increasing the GEF's effectiveness requires making more use of the expertise of financing agencies with deep country knowledge and an economy-wide mandate, for example the World Bank and regional development banks. Their expertise can help identify what investment and expenditure are being planned by the private sector and how these investments can be influenced by public policy, regulatory decisions, and GEF investment.

**6. Revisit the GEF results framework**, including (i) integrating indicators of transformational change into the framework to measure the GEF's contribution to creating enabling conditions for transformation, (ii) capturing socioeconomic and adaptation co-benefits and links with GEBs, and (iii) considering whether current core indicators are sufficiently focused on environmental outcomes.

STAP recommends revisiting the results framework to distinguish between targeted outcomes, socioeconomic and adaptation co-benefits, and lead indicators of transformational change.

Some core indicators do target environmental outcomes effectively, for example greenhouse gas emissions reduced or avoided and persistent organic pollutants removed, disposed of, or destroyed. Other core indicators suggest a direction of change but not a quantified environmental benefit – for example, the area of land under restoration, protected areas created, and shared water ecosystems under cooperative management – and these should be reviewed.

The results framework should highlight socioeconomic and adaptation co-benefits and their interlinkages with environmental goals. Many co-benefits are not simply incidental outcomes but prerequisites to delivering GEBs, for example improved health and livelihoods, and advances in social equity, tenure rights, transparency, and accountability. Tracking such benefits would provide a more integrated picture of GEF outcomes and help broaden the constituency for investment in GEBs.

Integrating lead indicators of transformational change would provide a signal of progress towards transformation goals. These indicators would focus on influencing the key enabling factors essential for transformation. For example, the GEF could measure (i) how its investment and partnerships influence enabling factors that help innovation to scale; (ii) policies that advance policy coherence or reduce perverse subsidies; (iii) shifts in social norms and behaviours, such as reducing overconsumption, or shifts in public support for economic transitions to sustainability; and (iv) investment flows for nature-positive solutions, practices, or technologies.

**7. Foster early and adaptive learning, and networked knowledge management** by making more use of midterm reviews and annual performance implementation reports to generate early learning and knowledge and to support adaptive management, and by ensuring that the GEF’s monitoring, evaluation, and learning system is transparent, open access, and networked with other actors to increase effectiveness and expand influence.

Identifying early lessons, enabling rapid exchange, and supporting adaptive program management are essential to the GEF’s contribution to systems transformation. The GEF has recently adopted the [Strategy for Knowledge Management and Learning](#), which now needs to be implemented.

The GEF needs to capture lessons learned on what works and what doesn’t, why, how, and in what context. To achieve this, it needs to shift towards a more effective system of monitoring, evaluation, and learning to answer specific questions based on a theory of change that links actions to outcomes. This will require establishing the right institutional practices and norms within the GEF Partnership.

For legacy projects, there may be opportunities to apply new machine learning technologies to harvest and share prior evidence more effectively.

Knowledge management and learning systems should be open and networked. Learning in the GEF could be integrated with existing knowledge platforms that already have a broad user base, such as the [World Overview of Conservation Approaches and Technologies \(WOCAT\)](#), or the [Conservation Measures Partnership](#).

The GEF should contribute to learning networks, including those sponsored by philanthropic foundations. Bringing GEF agencies and country partners into more frequent and focused conversations with innovators in philanthropy, government, civil society, and the private sector could help accelerate learning, adaptation, and exchange of experience in ways that are relatively low cost but high impact.

The strategy requirements and associated recommendations are summarised in Figure 1 below.



**Figure 1.** A visual summary of STAP analysis of GEF-9 strategy requirements, with corresponding recommendations. The left side represents the strategy requirements. The right side presents STAP’s recommendations mapped against those strategy requirements. Early and adaptive learning and a networked knowledge management system (recommendation 7) are needed to capture lessons, enable rapid exchange, and implement adaptive management as the six other recommendations are executed.

### 3. Other recent reports

#### Community-based approaches

The Independent Evaluation Office's [Evaluation of Community-Based Approaches at the GEF](#) recommended that the GEF should provide more clarity and guidance on when and how community-based approaches (CBAs) could be used in GEF projects. The STAP information note [Community-based Approaches](#) sets out STAP's contribution to this task, having reviewed the available literature on this topic.

CBAs can be key to success when projects seek to effect change in ecosystems to which people have de jure or de facto rights. STAP recommends that "CBAs should be considered when community stewardship of local environments is key to achieving GEBs, when community practices put GEBs at risk and could be shifted to more sustainable practices, and when projects affect livelihoods."

Factors to consider in designing CBA projects include ensuring that all relevant stakeholders are incorporated, that co-design and co-management arrangements with clear roles and responsibilities are in place, and that project goals and community needs align.

The note highlights questions to help assess whether a project is incorporating CBA elements during implementation, for example whether (i) the governance structure ensures equitable sharing of powers; (ii) monitoring, learning, and evaluation processes include local communities; (iii) the implementation strategy includes plans to ensure continuity beyond the life of initial investments; and (iv) the project improves local communities' access to information and solutions for ecosystem management.

The note suggests three issues for further considerations: local stakeholder consultation, local community capacity-building, and the need for long-term funding to ensure durable outcomes.

#### Clarifying risks in GEF projects

In February 2024, the GEF Council adopted the GEF Risk Appetite, which described the level of risk the GEF is prepared to take in its ambition to achieve GEBs.

The instructions to assess risk, as currently written, are very brief and have three steps:<sup>2</sup> describe the nature of the risk to project outcome; identify relevant mitigating measures; and assign a rating to the level of residual risk. (Residual risk refers to the risk expected to remain after the application of mitigation measures.)

STAP has identified two issues, after consultation with the agencies, that would benefit from further clarification. First, there is sometimes confusion about distinguishing between the nature of the risk, the mitigating measures, and the residual risk. Second, the risk framework introduces a new dimension of "Innovation risk", and there is some uncertainty about how best to interpret, describe, and assess this risk.

The STAP information note on [Clarifying risks in GEF projects, with a focus on innovation risks](#) covers the basic concepts, distinguishing the overall challenges the project aims to address from the risks that remain

---

<sup>2</sup> See Annex B of the GEF Risk Appetite at <https://www.thegef.org/council-meeting-documents/gef-c-66-13>.

once a project design logic has been adopted; describes how to avoid the most common pitfalls associated with each of the three steps of risk assessment; and illustrates the application of these concepts, with examples of completed risk tables for Innovation risk.

The note has a particular focus on Innovation risk, including the implications of the GEF Council’s decision to adopt a high appetite for innovation in support of transformational change. For innovation risks in particular, a rapid cycle of learning and adaptation is ideal. For example, as a novel policy is adopted or a new technology demonstrates market fit, attention needs to move to addressing risks in the process of scaling the innovations. STAP will work with the GEF Secretariat to develop training materials on risk appetite for the agencies early in 2025.

#### **4. Other STAP activities**

##### **10th GEF Biennial International Waters Conference**

Dr Susanne Schmeier and Dr Virginia Gorsevski, STAP Panel Member and Secretariat Lead for International Waters, respectively, participated in the 10th GEF Biennial International Waters Conference in Punta del Este, Uruguay, on 23–26 September 2024. The conference, the main learning and exchange event for GEF-funded International Waters projects, brought together leaders, experts, and practitioners to tackle global challenges on water and ocean sustainability within the framework of the Sustainable Development Goals. Dr Schmeier delivered two keynotes and one opening speech and led a hands-on workshop about fostering collaborative water governance in shared river basins. Dr Gorsevski led an interactive clinic on STAP’s guidance on good project design.

##### **GEF technical workshop, “Advancing the integrated approach for transformative change in tropical forest biomes”**

Dr Mark Stafford Smith, Senior Advisor to the STAP Chair, participated in a workshop on the Amazon, Congo, and Critical Forest Biomes Integrated Program in Panama in October 2024. The workshop brought together experts from within and outside the GEF Partnership to establish a framework for learning and knowledge-sharing to advance transformative change in primary tropical forests using the Integrated Program’s regional knowledge platforms. The workshop considered some common implementation principles to facilitate the exchanges between the regional platforms and synergy with other relevant GEF-8 Integrated Programs: Ecosystem Restoration, Food Systems, Wildlife Conservation for Development, and Net-Zero Nature-Positive Accelerator. Dr Stafford Smith contributed to the technical discussions, highlighting STAP’s perspectives on transformation and knowledge management. He also assisted with developing common principles for strengthening knowledge management, learning, and the interoperability of the Integrated Programs’ regional and global coordinating project platforms.

##### **GEF conference on Target 18 of the Global Biodiversity Framework**

STAP Chair, Dr Rosina Bierbaum, moderated the one-day GEF-convened conference “Target 18: creating the right incentives for a nature-positive future” during the 16th Meeting of the Conference of the Parties (COP16) to the Convention on Biological Diversity in Cali, Colombia, on 27 October 2024. This event focused on reforming harmful subsidies, creating positive incentives, and aligning policies to achieve

Target 18 of the Kunming-Montreal Global Biodiversity Framework. It featured high-level representation, including former ministers, the philanthropic community, the business sector, multilateral development banks, NGOs, and an audience of more than 200 participants, who exchanged information and recommendations on achieving Target 18. Key messages included the importance of policy coherence, behaviour change, public-private partnerships, a greater appetite for innovation risk, consideration and communication of co-benefits, capacity-building, and leadership at all levels. Panellists emphasized the need for innovative solutions and risk-sharing, the importance of working collectively across ministries and with the private sector and civil society, and the need for new economic models to understand and consider the trade-offs between biodiversity conservation and development. A recording of the event is available on the [GEF website](#).

### **GEF expert workshop, “Advancing the integrated approach to achieve resilient food systems in Africa”**

In November, Dr Ermias Betemariam, STAP Panel Member for Land Degradation, attended this workshop in Nairobi, Kenya, jointly organized by the GEF Secretariat and the International Fund for Agricultural Development (IFAD). The workshop brought together experts from across the GEF agencies and partners involved in the IFAD–GEF program “Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa” – one of the three GEF-6 Integrated Approach Pilots. The workshop discussed emerging lessons from advancing an integrated approach to support resilient agroecosystems for smallholder farmers. The overarching objective was to synthesize knowledge on key global achievements and identify gaps and limitations. Dr Betemariam made a presentation on the nexus between food systems and the global environment, which emphasized the importance of integrating soil management, biodiversity, and climate to achieve sustainable food systems.

### **GEF inter-agency evaluation workshop**

Mr Christopher Whaley, Senior Advisor to the STAP Chair, participated in the first GEF inter-agency evaluation workshop, held in Rome, Italy, on 1–2 October and organized by the GEF Independent Evaluation Office and the Food and Agriculture Organization of the United Nations. This was an opportunity for GEF evaluators to discuss topics including how to strengthen evaluation in the GEF Partnership, how to evaluate the Integrated and Impact Programs, and what evidence could be incorporated into the special themes for OPS8 (the eighth Overall Performance Study of the GEF).

### **Work with the Gordon and Betty Moore Foundation**

STAP is working with the Moore Foundation to consider how the Foundation’s approach to monitoring, evaluation, and learning might be applied in the GEF context; this approach uses project life cycle monitoring to answer specific questions based on a theory of change that links actions to outcomes and is designed to generate early learning and enable adaptive management. This work is also looking at the Food Systems, Land Use, and Restoration Impact Program as a possible case study and reviewing a sample of child project (annual) implementation reports. (This Impact Program promotes sustainable, integrated landscapes and efficient food value and supply chains at scale, with GEF funding of \$345 million, and \$2.7 billion in co-financing.)

## **UNCCD COP16 STAP side event**

STAP organized a side event on drought resilience and the global environment at the 16th Conference of the Parties (COP16) to the United Nations Convention to Combat Desertification (UNCCD) in Riyadh, Saudi Arabia, in December 2024. The event featured the presentation of national drought plans from Argentina and Mauritania. Dr Betemariam moderated a panel discussion during the event, focusing on how proactive approaches to drought can help address global environmental challenges, including land degradation, water scarcity, biodiversity loss, and climate change vulnerability – issues that are central to the UNCCD and the GEF. The panel included representatives from Argentina and Mauritania, the UNCCD, the German Institute of Development and Sustainability, and the GEF Secretariat. Prior to the side event, STAP prepared the information brief, [Why drought matters for the global environment](#), which guided the discussions.

## **Review of GEF Trust Fund and LDCF/SCCF work program**

STAP reviewed the December 2024 work program of the GEF Trust Fund, the Least Developed Countries Fund (LDCF), and the Special Climate Change Fund (SCCF). The work program comprised 34 projects and programs: 23 GEF Trust Fund, six LDCF, one SCC, and four multi-trust fund (GEF Trust Fund and LDCF/SCCF) projects or programs. The STAP Chair will present STAP's observations on the work program during her Council presentation.

## **STAP's future work program**

STAP will continue to work with the GEF Secretariat on the Technical Advisory Group (TAG) meeting to be held in February in preparation for the GEF-9 replenishment and will consider its future work program after the TAG meeting.

## **5. STAP Panel member updates**

STAP welcomes **Dr Sandy Andelman** as its new Panel Member for Biodiversity. Dr Andelman is a conservation scientist with over 30 years of experience designing and implementing local- to global-scale initiatives at the intersection of science, policy, and practice across Africa, Asia, Latin America, and the United States. Her research has focused on understanding the effectiveness of protected areas in the face of climate change, particularly in tropical forests, with publications in a wide variety of fields, including biodiversity monitoring systems, systematic conservation planning, ecological informatics, climate change and protected areas, and the connections between nature conservation and food security. She has served as a board member and adviser for several organizations, including the Legacy Landscapes Fund, the JRS Biodiversity Foundation, the US National Science Foundation, the European Research Council, the German Research Foundation, and the Chilean National Commission for Scientific and Technological Research. She was also a World Economic Forum Transformation Leader and a member of the World Economic Forum's Global Agenda Council for Food Security.

Dr Andelman succeeds **Dr John Donaldson**, who completed his term in September 2024.

## Panel members' other activities

**Dr Rosina Bierbaum**, STAP Chair, gave two talks to open and close the STAP expert consultation meeting following the June Council. As well, she worked with the NDC Partnership and a team of experts to develop [guidance for NDC 3.0](#) (the next round of nationally determined contributions); the full paper will be available by 15 December. In addition to the Target 18 workshop at the Convention on Biological Diversity COP16, Dr Bierbaum has participated in a number of side events on conservation, nature-based solutions, and digital sequence information. She gave a briefing on emerging issues at the intersection of environment and science at the Moore Foundation retreat on 22 August, and chaired the Conservation and Wildlife Health Committee at the Wildlife Conservation Society on 7 November. She also worked with the GEF Secretariat on preliminary materials for the TAG meeting for February.

**Dr Ngonidzashe Chirinda**, Panel Member for Climate Change Mitigation, was a member of a technical working group that supported the [Climate Bond Initiative to develop new criteria for agricultural production \(crop and livestock\)](#). He also participated in the AgriGHG2024 conference organized by the German Federal Ministry of Food and Agriculture, the Global Research Alliance on Agricultural Greenhouse Gases, CGIAR, and the German Federal Research Institute, where he presented the new Africa Carbon Flagship program. He was a panellist at the Climate Summit organized by the Government of Uganda and at a workshop held in Mexico organized by the Universidad Nacional Autónoma de México. In the past six months, Dr Chirinda has co-authored two articles: [Optimizing split-fertilizer applications for enhanced maize yield and nutrient use efficiency in Nigeria's Middle-belt](#) and [Perspectives on the integration of agri-entrepreneurship in tertiary agricultural education in Africa](#). He was an expert reviewer of the [Global Nitrous Oxide Assessment](#) recently published by the United Nations Environment Programme and the Food and Agriculture Organization of the United Nations and released at the 29th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29).

**Dr Miriam Diamond**, Panel Member for Chemicals and Waste, continues work to establish the Science-Policy Panel for the sound management of chemicals and waste and to prevent pollution, including participating in the third meeting held in Geneva, Switzerland, in June 2024. She prepared several policy briefs for that meeting, including on solution-oriented assessments. Dr Diamond was the lead author of a [peer-reviewed publication exploring the types of assessments that the panel might undertake](#). She published six additional peer-reviewed articles on topics from improving the management of phthalate chemicals for human health protection, to critiquing bioplastics being promoted for use in the health care sector, to documenting microplastics in snow from mid-latitude to high-latitude North America. She delivered a keynote talk for the “Safe and Sustainable by Design” conference in Locarno, Switzerland. Dr Diamond continues her work as an Earth Commissioner, responsible for novel entities as part of efforts by the Earth Commission 2.0.

**Dr Ermias Betemariam**, Panel Member for Land Degradation, was appointed to the High-Level Advisory Group for the Riyadh Action Agenda, an initiative launched under the UNCCD COP16 by the Presidency of the Kingdom of Saudi Arabia. The Action Agenda's purpose is to scale efforts on land by fostering partnerships and linking to outcomes from global initiatives, such as the G7, G20, Convention on Biological Diversity COP16, and UNFCCC COP29. As a member of the Advisory Group, Dr Betemariam will provide guidance on drought resilience, land restoration, and conservation efforts.

**Dr Susanne Schmeier**, Panel Member for International Waters, was awarded a [research grant from the U.S. Department of Defense’s Minerva Research Initiative](#) as part of a consortium at Oregon State University, for research to collect data on water conflict and cooperation events and evaluate how to efficiently buffer societies from shocks to water system. Dr Schmeier attended the [World Water Week in Stockholm](#), where she spoke at various events on the funding and financing of transboundary water cooperation and on the role of legal and institutional arrangements for sharing water resources. She was also part of the launch of a new data explorer tool, the [Transboundary Freshwater Diplomacy Database](#), which was created as an initiative under the [Shared Waters Lab Partnership](#). She co-authored a paper that focuses on [how rights to nature are granted in freshwater and marine ecosystems around the world](#).

**Dr Jonathon Barnett**, Panel Member for Climate Change Adaptation, was awarded a grant for research on novel systems for monitoring social-ecological change in the South Pacific, from the Melbourne–CNRS Network, a partnership between the University of Melbourne and the Centre National de la Recherche Scientifique, France. Dr Barnett co-authored two papers, one [analysing migration as a mechanism for climate change adaptation](#) and another discussing the [socioeconomic and cultural factors underpinning climate change adaptation](#). He also contributed to a rapid assessment report on climate adaptation activities in Australia.

**Dr Blake Ratner**, Advisor to the Chair, led a midterm evaluation commissioned by the Mexican Fund for the Conservation of Nature to assess two closely aligned projects of the GEF and the Green Climate Fund on watersheds. He co-led national workshops in Guatemala and Kenya on collaborative planning – linking community-led landscape regeneration, agroecology, Indigenous resource rights, and policy reform – in collaboration with the CGIAR. He also facilitated the expert consultation on behalf of STAP to inform its initial perspective and recommendations on GEF-9.