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Agenda Item 08

**REPORT OF THE CHAIRPERSON OF THE  
SCIENTIFIC AND TECHNICAL ADVISORY PANEL**

# **REPORT OF THE CHAIR OF THE SCIENTIFIC AND TECHNICAL ADVISORY PANEL (STAP) TO THE 57TH MEETING OF GEF COUNCIL**

## **Introduction**

This report provides an update on STAP's work since the last Council meeting in June 2019.

Over the last 6 months STAP has worked on:

1. Following up the discussion at the June Council on the Impact Programs, climate risk assessment guidelines, and durability of outcomes
2. Guidelines for Land Degradation Neutrality (final)
3. Blockchain
4. Remote sensing
5. Theory of change guidance
6. Multi-stakeholder dialogue
7. Current and future work program
8. Other STAP activities
9. Screening the December GEF work program.

## **1. Following up discussion at the June Council**

### **(i) Impact Programs**

In March, STAP provided advice to the agencies on six issues STAP would look at in particular when screening the Impact Programs (IPs) to help promote innovation, integration, and transformation: innovative approaches to foster scaling (technological, financial, business model, policy, and institutional); identifying barriers to scaling and transformation; maximising global environmental benefits, capture synergies, and managing trade-offs; use of multi-stakeholder processes; a strong theory of change; and monitoring, evaluation and learning throughout implementation.

STAP Panel Members have been actively engaged in the groups which have been developing the IPs and working to ensure that these 6 elements are incorporated, particularly in the regional and global coordinating projects.

On the Food Systems, Land Use and Restoration (FOLUR) IP, Dr. Blake Ratner took part in a technical discussion meeting in August at the World Bank which discussed the design of the Global Platform Project, how to aggregate the child projects to achieve global environmental benefits, and transformational change, and to ensure that the Global Platform adds value to the IP. Dr. Ratner emphasised the barriers to, and enablers of, scaling and transformation to help determine how the Global Platform can amplify the impacts of the child projects, and thereby achieve transformational change. He drew from the recommendations on durability and transformational change in STAP's paper on "Achieving More Enduring Outcomes from GEF investments". And in September, Dr. Ratner screened five expressions of interest for the FOLUR IP, and participated in the subsequent discussion.

On the Drylands Sustainable Landscape IP, Dr. Graciela Metternicht participated in a meeting in September to develop the Global Coordination Project, and to discuss the project's outcomes and results-based framework; this was held in the margins of the Conference of the Parties to the United Nations Convention to Combat Desertification (UNCCD), in New Delhi. Dr. Metternicht emphasized applying the Land Degradation Neutrality (LDN) Framework, and using STAP's guidelines on LDN (see below for further information). She highlighted the use of LDN for landscape planning, and as a way to reconcile agriculture, conservation, and other competing land uses. Dr. Metternicht drew attention to: land rehabilitation, as a less costly option to restoration; clarifying where responsibility for scaling should rest; and identifying the assumptions which underlie the theory of change, which were further clarified.

On the Sustainable Cities IPs, Dr. Saleem Ali participated in a consultation meeting in September at the World Resource Institute to develop the Program Framework Document (PFD). Dr. Ali reiterated STAP's criteria for screening the PFD for the Impact Programs and STAP's comments on the Expressions of Interest. These were: the importance of an integrated approach to designing interventions; addressing root causes and behavioural change; demonstrating innovation; developing a robust theory of change; and strengthening private sector involvement. STAP's advice was well received, and reflected in the Sustainable Cities IP PFD reviewed in December.

## **(ii) Climate risk assessment**

At the June 2019 Council meeting, STAP presented guidance which set out a common standard for climate risk screening of GEF projects based on the Intergovernmental Panel on Climate Change (IPCC), and building on earlier work by STAP undertaken over the last several years in response to the Council's request that STAP examine the effects of climate change on GEF project outcomes.

At a minimum, each agency should use a risk screening process that includes four steps (hazard identification, assessment of vulnerability and exposure, risk classification, risk mitigation plan), ranks risks according to a clearly defined scale, and uses the best available data.

At the GEF agency retreat in September, Dr. Bierbaum chaired a session on climate risk screening methods. The World Bank and the International Fund for Agricultural Development shared their methods and tools for assessing climate risk. The discussion focused on 'best practices' such as the importance of understanding how climate risks may affect projects, using this to inform a climate-smart project design, and how to identify adaptation co-benefits.

The GEF Secretariat asked STAP for an interim report on the tools and methods which agencies are currently using, as a prelude to a possible Council decision in June 2020 on approved methods. STAP has requested the agencies for information on the following four questions:

- What method or tool does your agency use to assess climate risk for GEF projects?
- Does this meet the requirements of the four-step process set out in STAP's guidance on climate risk assessment?
- Is this sufficient to answer the questions on climate risk in STAP's guidelines for screening GEF projects?
- Are there particular methods or tools that you would like to bring to STAP's attention?

STAP's analysis of this information will be presented in the STAP Chair's presentation to the December Council, and will inform the Council decision.

### **(iii) Durability**

At the GEF agency retreat in September, Dr. Bierbaum also chaired a session on durability, which focused on STAP's paper, "Achieving more enduring outcomes from GEF investment"<sup>1</sup>. This set out principles for securing durability in project outcomes and impacts: engaging the right stakeholders; building the incentives for these key actors to act; incorporating adequate diversity and flexibility in project design and implementation; and underpinning it all with a systems-thinking approach.

IUCN, UNDP, and the World Bank shared their experiences on durability, including: their approach to durability, good practice examples, analysis of factors affecting and actions to ensure durability, and lessons learned.

STAP welcomes the GEF Secretariat's paper, "Towards greater durability of GEF investments", and looks forward to improving how durability principles are embedded in the design of GEF investments going forward. Additionally, STAP believes that its primer on theory of change<sup>2</sup> and forthcoming paper on multi-stakeholder dialogue should contribute to advancing thinking on durability.

## **2. Land Degradation Neutrality (LDN) guidelines**

The purpose of LDN is to preserve the land resource base, by ensuring no net loss of healthy and productive land, at national level, and it is achieved through a combination of measures that avoid, reduce and reverse land degradation. The concept was introduced by the UNCCD in 2015, and it was subsequently adopted as a target of Goal 15 of the SDGs, Life on Land.

The objectives are<sup>3</sup>:

- to maintain or improve the sustainable delivery of ecosystem services
- to maintain or improve productivity, in order to enhance food security
- to increase resilience of the land and populations dependent on the land
- to seek synergies with other social, economic and environmental objectives
- to reinforce responsible and inclusive governance of land.

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<sup>1</sup> The paper can be accessed at: <http://www.stapgef.org/achieving-enduring-outcomes-gef-investment>

<sup>2</sup> See <http://stapgef.org/theory-change-primer>

<sup>3</sup> Orr, B.J., A.L. Cowie, V.M. Castillo Sanchez, P. Chasek, N.D. Crossman, A. Erlewein, G. Louwagie, M. Maron, G.I. Metternicht, S. Minelli, A.E. Tengberg, S. Walter, and S. Welton. 2017. Scientific Conceptual Framework for Land Degradation Neutrality. A Report of the Science-Policy Interface. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany.

In GEF-7, the GEF is supporting LDN through the Land Degradation focal area, and in the Impact Programs.

- In FOLUR, LDN is used as an integrated approach to the implementation of sustainable land management to increase the prospects for food security for smallholders and communities that are dependent on farming for their livelihoods.
- In the Sustainable Forest Management, LDN approaches will be used to avoid further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes.
- In the Sustainable Cities IP, projects will seek to create opportunities for countries to integrate voluntary LDN targets into their urban planning.

STAP developed guidelines to assist the GEF with implementing LDN, and in response to a request from the UNCCD Parties for support in capacity building, reporting, and the setting of LDN targets.

To achieve LDN requires estimating the likely cumulative impacts of land use and land management decisions, and counterbalancing anticipated losses through avoiding loss, rehabilitating or restoring degraded land, within the same land type.

The guidelines offer help in developing projects: they outline the key concepts, state principles, and present practical steps, e.g. describing the system, identifying baseline values (for land cover, land productivity, and carbon stocks), planning sustainable land management, designing interventions, and suggest resources (data, tools, explanatory documents). The guidelines also cover how to lay the foundations necessary to achieve LDN through enabling policies, integrated land use planning, and preparatory assessments. They are intended to be used in project development, for defining the problem, designing interventions, and are relevant also to monitoring the achievement of LDN.

The final guidelines were presented at a STAP side event at the fourteenth Conference of the Parties to the United Nations Convention to Combat Desertification. The guidelines are on the STAP website, together with a shorter version of the guidelines, which sets out the essentials, without going into detail, and a two-page policy brief<sup>4</sup>.

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<sup>4</sup> A.L. Cowie, 2019. Guidelines for the application of the “Scientific Conceptual Framework for Land Degradation Neutrality” A report prepared for the Scientific and Technical Advisory Panel of the Global Environment Facility. <http://www.stagef.org/guidelines-land-degradation-neutrality>

### 3. Blockchain

STAP's report on Novel Entities<sup>5</sup> identified blockchain as an important technology that can help generate global environment benefits across all GEF's focal areas and Impact Programs. The report concluded that the GEF, in the near-term, should focus on harnessing the benefits of blockchain while minimising potential negative impacts. The novel entities paper has just been published in *Environmental Science and Policy*<sup>6</sup>. (STAP is working to publish more of its analyses in the peer-reviewed literature.)

STAP organised a workshop in October which brought together leading experts to assess further how blockchain could assist the GEF, and to identify what action the GEF might take in consequence: the STAP chair, Dr. Saleem Ali, and Dr. Jamidu Katima took part in the workshop. Workshop participants highlighted several areas of GEF's work to which blockchain could contribute. For example, the monetization of ecosystem services using blockchain can incentivize sustainable agriculture to protect habitats, reduce biodiversity loss, and facilitate sustainable land management; and blockchain traceability can be used to track fish and other sea-foods thereby mitigating illegal fishing. The workshop also identified some drawbacks and challenges to using blockchain, including its energy consumption, and limited digital access in some developing countries.

Blockchain is a tool that makes it possible for a piece of digitalized data to be recorded and tracked from its source with an encrypted stream of information that can only be decoded by a distributed peer-to-peer network. Blockchain does not depend on centralised authority but uses peer-to-peer networks to maintain and update records. It is particularly useful in situations where accurate record-keeping, greater transparency, increased trust, enhanced security, improved traceability, increased efficiency and speed of transactions, and reduced cost are needed.

Blockchain alone will not solve environmental problems: it is an enabling technology which, when used with complementary technologies, for example, the Internet of Things, Artificial Intelligence, environmental sensors, and remote sensing, can help to address environmental problems.

Environmental applications of blockchain include:

- improved monitoring, reporting, and verification systems
- incentives for sustainable resource management, e.g. by monetizing natural resources
- sustainable and transparent supply chains
- transforming the carbon market
- sustainable urban and rural development
- innovative and sustainable environmental finance and business models

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<sup>5</sup> <http://www.stagef.org/novel-entities>

<sup>6</sup> <https://www.sciencedirect.com/science/article/abs/pii/S146290111930317X>

STAP's paper, "Harnessing blockchain technology for the delivery of global environmental benefits"<sup>7</sup>, explains what blockchain technology is, how it works, and offers some questions for assessing the applicability of blockchain.

The paper maps GEF-7 objectives for each of the GEF focal areas and the IPs against a non-exhaustive list of existing, and proposed uses of blockchain, and recommends that the GEF should consider a number of near-term opportunities including: to track and verify sustainable charcoal production; to improve the transparency of commodity supply chains and provide incentives for producers to adopt more sustainable practices through monetising ecosystem services; to improve the security and accuracy of land tenure systems; to improve energy access through a combination of decentralised renewable energy sources paired with microgrids to enable peer-to-peer markets and community trading; to improve traceability of energy sources and enable users to differentiate between renewables and fossil fuels; to explore blockchain applications to facilitate the decarbonisation of transportation systems, and to Improve the traceability and tracking of chemicals supply chains.

#### **4. Earth Observation and the GEF**

GEF projects require a range of data and information across broad landscapes and time periods that cannot be collected using field-based methods alone. The use of Earth observation technologies can enable, for example, the identification and detailing of biophysical characteristics of habitats, and detection of natural and human-caused environmental change from local to global scales. This type of information can be used to understand past trends, support management decisions, and monitor the impact of GEF projects. Additional benefits include: regular and broad geographical coverage; cost-effective monitoring; reduced need for field work; open and transparent sources of information; and data available beyond project completion.

Since 2017, the Project Information Form (PIF) requires project proponents to provide a map and geo-coordinates of the project's location. A PIF map could benefit from being integrated with information derived from Earth observation, but there remains limited guidance on how this information should be provided.

Most GEF agencies already make some use of geospatial information and Earth observation technology to design, implement, monitor and evaluate interventions, and several have a designated lead person for geospatial technology. The PIF requirement on mapping and geocoding is also encouraging GEF agencies to provide spatial data for their projects.

Earth observation technology is useful at several points in the GEF project cycle: concept development, project preparation, implementation, including adaptive management, and monitoring and evaluation.

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<sup>7</sup> See <http://stapgef.org/harnessing-blockchain-technology-delivery-global-environmental-benefits>

“Earth Observation and the GEF”<sup>8</sup>, is a short version of a full STAP paper which will be available in January. This will include:

- a detailed explanation of Earth observation, and explain the key properties and applications of optical, radar, and lidar remote sensing, including information on data sources and platforms;
- selected GEF and non-GEF case studies, showing the application of remote sensing at different project stages, by focal area, and technology, and illustrating how these data and tools can be used; and
- advice on how to assess a project’s information requirements, and how to decide whether remote sensing can help to meet those requirements.

The paper proposes:

- a harmonised approach to meeting the PIF requirements on geo-coordinates, using geonames.org, with advice on the essential elements of a project map;
- that the GEF portal provide fields and simple tools to capture and validate geographic data on the location of projects, which allow agencies to update information over GEF project cycle; and
- that a self-learning package should be developed, by STAP and the GEF Secretariat, on Earth Observation, and a workshop be held at which the agencies can share their experiences for improving the use of geospatial data.

## 5. Theory of change

At the June Council, the STAP Chair noted that in screening the IP program framework documents, and other projects in the work program, there appeared to be varying interpretations about what was a theory of change. STAP has therefore developed a “Theory of change primer”<sup>9</sup>.

The essential distinctive elements of a theory of change (ToC) are:

- identify specific causal links among outputs and outcomes, with evidence
- describe the pathways by which interventions are expected to have effect, and identify indicators to test their validity over time
- be explicit about assumptions about these pathways, which includes an analysis of barriers and enablers as well as indicators of success.

ToC processes should be clear about goals or intended impacts and work back from these to intervention points. ToCs should be explicit about causal pathways and test the logic of these and

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<sup>8</sup> See <http://stapgef.org/earth-observation-and-gef>

<sup>9</sup> See <http://stapgef.org/theory-change-primer>



associated risks. What is within the intervention's scope should be clearly identified, and include indicators of success.

A good ToC should be: plausible and present clear logical pathways from the intervention outputs through outcomes to the long-term goal of achieving global environmental benefits; feasible and identify realistic outputs, partnerships and complementary pathways by others to drive the necessary change, taking account of potential barriers, enablers and risks; and testable by clearly outlining measurable indicators of change through the pathways, and points where the ToC might be reviewed.

There are several reasons for developing a sound ToC, which can be summarised as follows:

- Design – to make projects more effective
- Engage – to help teams work together to achieve a shared understanding of an intervention; and to help to engage and develop ownership with partners and stakeholders
- Communicate – to communicate a project's aims and set of activities quickly, internally and externally, as well as to highlight the process of change
- Measure – to help teams learn from data collection on gaps in the existing evidence base, to allow adaptive adjustments of an intervention during its lifetime, and to ensure indicators of success are in place for later evaluation.

The primer includes how-to-do a ToC, FAQs, examples of ToCs, and sources of further information: it is accompanied by a literature review and annotated bibliography, both of which are available on the GEF and STAP websites<sup>10</sup>.

## 6. Multi-stakeholder dialogue for transformational change

The GEF-7 programming directions commit the GEF partnership to enhance *integration* across sectors, catalyse *innovation* to alter systems that degrade the global environment, and leverage *multi-stakeholder coalitions* to influence *transformational change* across scales<sup>11</sup>.

Recent STAP papers address the priorities of integration (June 2018)<sup>12</sup>, innovation (February 2019)<sup>13</sup>, and enduring outcomes (June 2019)<sup>14</sup>. The last paper identifies multi-stakeholder dialogue as a key element in promoting integration, innovation, learning, scaling and, ultimately, enduring transformational change, as did the integration paper.

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<sup>10</sup> See <http://stapgef.org/theory-change-primer>

<sup>11</sup> GEF 7 Programming Directions, GEF/R.7/19. April 2018.

<sup>12</sup> Bierbaum, et al. 2018. Integration: to solve complex environmental problems. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

<sup>13</sup> Toth, F., 2018. Innovation and the GEF: Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.

<sup>14</sup> STAP, Achieving More Enduring Outcomes from GEF Investment. A STAP document. June 2019.

STAP's central proposition is that "structured dialogue processes can help build enduring coalitions to increase the likelihood of transformational change." The question is how to do this well in the context in which the GEF operates.

To probe this, STAP and The Gordon and Betty Moore Foundation held a workshop in November on multi-stakeholder dialogue and transformational change in social-ecological systems at the Moore Foundation headquarters in Palo Alto, California: the STAP chair, Dr. Blake Ratner, and Dr. Mark Stafford Smith took part in the workshop. The GEF and the Moore Foundation have shared programming interests, on biodiversity conservation in the Amazon, and on reducing the loss and degradation of forest ecosystems from the production of agricultural commodities. Both organisations are working to scale impact, create enduring change, and transform social-ecological systems.

The workshop brought together representatives from academia, non-governmental organizations, private sector, GEF agencies, the Moore Foundation, STAP, and the GEF Secretariat.

The workshop considered three topics:

- What is the evidence regarding the role of multi-stakeholder dialogue (MSD) in influencing transformation in social-ecological systems?
- What lessons can be derived from past experiences regarding strategies to build and sustain such multi-stakeholder dialogue processes?
- What implications does this have for GEF programming?

The Meridian Institute undertook a background literature review examining these questions, with particular emphasis on the role and potential of multi-stakeholder dialogue processes in contributing to successful regional or global coalitions for transformational change that integrate private sector actors, including multi-national corporations and industry associations. The draft review<sup>15</sup> indicated that:

- The peer-reviewed literature underlines the importance of understanding both the system dynamics of the projects that the GEF is convening and of the systems it hopes to affect
- A prerequisite to building effective dialogue is providing structures for interaction that recognize established relationships and account for them in the design of the process
- While the literature documents ways to understand the context of MSDs, research focusing on the effectiveness of responses to differing contexts is lacking
- The literature explores network structure, interest alignment, and the depth of change sought as factors that help understand what intensity of MSD is required to achieve desired outcomes
- Research providing practical insights into the design, implementation and effectiveness of MSD focusing specifically on transformative change is sparse and dispersed

The workshop brought together both academics and practitioners in the realm of MSD. It featured presentations on a number of GEF programs aimed at catalysing coalitions for change at regional or global scales: the Good Growth Partnership IAP (UNDP); the Food Security IAP (IFAD); the Food, Land

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<sup>15</sup> See <http://stapgef.org/multi-stakeholder-dialogue-transformative-change>

Use and Restoration IP (World Bank); and the Amazon Sustainable Landscape Program (World Bank). The Moore Foundation made presentations on its Forests and Agricultural Markets Initiative, and the Oceans and Seafood Markets Initiatives (<https://www.moore.org/programs/environmental-conservation>).

Drawing from these case studies, the peer-reviewed literature, and other participant's experiences, the workshop discussed the implications for the GEF.

Key messages which emerged:

- **Recognise MSD as one of several strategies for system transformation.** Systemic transformation processes typically involve confrontation as well as collaboration, and creation of new norms, behaviours and relationships, as well as the displacement of prior, unsustainable patterns of resource use. Effective MSD processes should clearly define: the social-ecological system in which they operate; key actors and barriers; and intended strategic contributions towards system transformation.
- **Support and complement existing initiatives.** There is often a preference to create a new dialogue platform with a distinct identity, but sometimes the better course is to strengthen, link, or address gaps in existing multi-stakeholder platforms. The GEF may: finance a new platform, after establishing there is a need; link together existing platforms, e.g. on different commodity value chains to address shared common challenges; or support, or participate in, an existing platform to raise the profile of a particular issue or increase the platform's reach.
- **Address power dynamics.** MSD processes need to assess the power dynamics among stakeholders in the broader system, and design efforts to address these through the dialogue process. This may require prior trust-building, capacity building and preparation among typically marginalised groups, as well as integration of science-based evidence and scenario building to inform deliberation. It also requires skilled facilitation.
- **Enable adaptive program implementation.** MSD approaches can support all stages of the project cycle, from identification through design, implementation and evaluation, ideally setting the stage for enduring impacts by enabling long-term collaborative actions well beyond the life of the investment. This requires being clear about the degree of flexibility to adapt activities (and budgets) to support shifts in approach to the overarching goal, which may require changes to the GEF programming cycle.
- **Embed monitoring, evaluation, and learning** to track the role of MSD in broader processes of transformational change. Having a strong Theory of Change provides a foundation for monitoring and evaluating the actual contributions of MSD efforts in practice, the challenges faced, and the degree to which they are delivering—in ways both planned and unexpected.

The workshop confirmed both the importance and feasibility of developing **evidence-based guidance** to support the design of effective MSD processes to contribute to transformational change. While good design is highly context-specific, it is possible to lay out key questions that organizers need to address

and factors that should be taken into account. These design questions address scope (how narrow or broad in focus), scale (from subnational to regional and global engagement), purpose (clarity on proximate and longer-term goals), initiation (who should convene), membership (who should be engaged and how), and approach (mode of convening and engagement), as well as resources to support effective implementation.

In the Spring, STAP will provide guidance on good practices to integrate multi-stakeholder dialogue in GEF-financed operations, building upon the workshop deliberations (see above), other practitioner efforts, and the peer-reviewed literature.

## **7. Current, and future work**

### **(i) Adaptation to climate change**

At the UN Climate Summit in September, the Global Commission on Adaptation (GCA) proposed eight action tracks on: finance and investment, food security and agriculture, nature-based solutions, water, cities, locally-led action, infrastructure and preventing disasters. Many of these are directly relevant to the GEF. The GCA has also published a series of 17 background papers, with more to come. At its recent retreat STAP reviewed these papers, and will provide advice on what they might imply for the GEF.

### **(ii) Chemicals and waste**

Chemicals and waste have often been treated as a standalone topic with limited integration with other focal areas, e.g. biodiversity, water, and land. STAP is preparing guidance which will review the interlinkages between the chemicals and waste and other focal areas; identify synergies and trade-offs; assess co-benefits that has been generated from past GEF chemicals and waste projects; and provide advice on how chemicals and waste projects could be developed that deliver multiple global environmental and socio-economic benefits.

### **(iii) Mainstreaming biodiversity**

A substantial volume of peer-reviewed and practitioner literature has been produced over the last 5 years, and mainstreaming biodiversity is expected to feature prominently in the post-2020 CBD framework. STAP is updating its previous advice (2004 and 2015) on mainstreaming biodiversity, in the light of new science and evidence, and to reflect STAP's advice, on integration, durability, theory of change, and multi-stakeholder processes.

### **(iv) Nature-based solutions**

Given an increased focus on implementing nature-based solutions by the Global Commission on Adaptation (of which the CEO is a Commissioner, and the STAP chair a science advisor) STAP will examine ways to identify best practices from the GEF and its agencies for the Global Commission on Adaptation's 'year of action'.

**(v) Technology-critical elements (TCEs)**

TCEs, e.g. rare-earth elements, were identified in STAP's paper on Novel Entities<sup>16</sup> as being particularly relevant to the GEF. This is because increasing demand for these elements is expected to shift their mining to countries where the GEF implements projects. TCEs are critical to renewable energy future, and other green and emerging technologies. However, increased use results in release into the environment, during extraction, processing, and production, as well as when products are disposed of. The impacts of TCEs on the environment may lead to land degradation, water contamination, chemicals, and waste pollution, deforestation, and loss of biodiversity. For example, the mining of one tonne of rare earth oxide may lead to the removal of about 300 square meters of vegetation and topsoil; generating 1000 tonnes of contaminated wastewater, and the release of 2000 tonnes of tailings into adjacent valleys and streams. STAP is preparing an analysis of the effects of TCEs on GEF projects, and also their benefits, and advice on how to maximise the benefits, while minimising the adverse impacts.

**(vi) Guidance on multi-stakeholder dialogue**

In the Spring, STAP will provide guidance on good practices for multi-stakeholder dialogue – see section 6 above.

**(vii) Climate risk assessment**

Further work on a possible framework, or menu of options, for climate risk assessment after review of the materials received from the agencies (still incoming) – see section 1 (ii) above.

**8. Other STAP activities**

**UNCCD COP 14, New Delhi, September 2019**

Dr. Graciela Metternicht led a session on STAP's guidelines for land degradation neutrality (LDN). Participants welcomed the guidelines and discussed how to use them in developing projects to avoid, reduce, and restore land degradation.

In addition, on GEF Day at the Rio Conventions Pavilion, Dr. Metternicht made a presentation on the science of transformational change, scaling up and replication, drawing from STAP's paper "Achieving more enduring outcomes from GEF investment".

**3rd Global Meeting of the Global Platform for Sustainable Cities of the GEF-6 Sustainable Cities Integrated Approach Pilot, Sao Paulo, 16-20 September 2019**

The meeting addressed successes and lessons learned from the GEF-6 Sustainable Cities IAP and how these may be relevant to the GEF-7. Dr. Saleem Ali addressed the conference on resourcing a more

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<sup>16</sup> <http://www.stapgef.org/novel-entities>

sustainable techno-urban transition by the effective management of mineral supply of smart cities, and on environmental conflict resolution and social participation in cities.

### **Third Session of the Conference of the Parties to the Minamata Convention (COP3)**

At the COP, Dr. Sunday Leonard (STAP Secretariat) made a presentation to the meeting of the GEF Chemical and Waste Task Force on STAP's screening guidelines for GEF projects, and provided advice to GEF agencies on how to prepare projects which meet the guidelines. He also highlighted STAP work on integration, innovation, durability, and climate risk assessment, as well as its forthcoming paper on the theory of change, as sources of helpful advice in developing projects.

### **UNFCCC COP25, Madrid, 2-13 December**

Dr. Saleem Ali served as a contributing author of the UNEP Emissions Gap Report 2019. At a side event, he highlighted the important role that enhancing material efficiency can play in bridging the emissions gap, and how GEF's work in the climate change focal area and sustainable cities Impact Program can contribute to achieving material efficiency.

Dr. Ali featured as a co-author at the Press Conference for the release of a book: *A Better Planet: 40 Big Ideas for a Sustainable Future*. This provides fresh thinking and forward-looking solutions on various environmental issues, including climate change, ecology, environmental justice, big data, and public health. At the event, he featured STAP's work on novel entities and how these can contribute to achieving environmental sustainability.

Dr. Ali also participated as a panelist at the Resilience Lab side event on "ensuring universal equitable coverage of, and open-access to, big data and information, and related benefits to human wellbeing": he spoke about STAP's recent work on harnessing blockchain technology to deliver global environmental benefits.

### **9. December GEF work program**

STAP screened 51 projects (total GEF investment of \$588.5 million and LDCF investment of \$59.95 million), of which 3 were GEF-LDCF, 5 were LDCF, 11 biodiversity, 7 climate mitigation, 4 international waters, 3 chemicals and waste, 2 land degradation, 14 multifocal area projects, and the Sustainable Cities PFD.

The STAP Chair will present STAP's observations on these projects at the Council meeting.