



Report of the Chairperson of the Scientific and Technical Advisory Panel (STAP) to the 50th GEF Council

1. Introduction

The following report is an update of highlights and the latest information on the implementation of the STAP Work Program that the Panel wishes to bring to the Council's attention. The report covers the period since STAP's last report to the Council in October 2015 until the present.

At the time of posting, the Panel was preparing to meet during the United Nations Environment Assembly (UNEA-2) in Nairobi to begin planning the next STAP Work Program, and contributions to future planning of the GEF -7 Strategy. Participation of the GEF CEO and UNEP Senior Management was planned for this session. STAP was also preparing contributions to a number of events including on Green Chemistry hosted by the German Government, Clean Cookstoves hosted by the Climate and Clean Air Coalition, and the session on Investing in the Global Commons hosted by the Global Environment Facility.

We are pleased to launch our most recent report "Planning for Resilience in the GEF Program"¹. We believe this report is groundbreaking in taking a widely used concept (and now a pillar of the GEF Program) but one which is poorly understood, and operationalizing this for the GEF. This report also represents a number of "firsts" for STAP. It is the first time that both the GEF CEO and STAP Chair have co-signed the foreword of a STAP report, highlighting its importance. It is also the first time that STAP and a government scientific body have co-financed the research, analysis, compilation, and testing that went into finalizing this report. The background concepts and theoretical underpinning of RAPTA are described in the accompanying technical report²

STAP is also presenting a conceptual framework to guide the design of future initiatives aimed at supporting green and blue growth in source-to-sea systems. Current approaches to environmental protection and development on land, along rivers and coastal zones, and in marine environments are struggling to effectively promote sustainability. In particular, ecosystems in a continuum from source to sea are being degraded as an unintended consequence of economic activities that might happen far upstream or downstream in the source-to-sea system. The conceptual framework builds on recent experiences of pro-sustainability action in source-to-sea systems around the world, and the paper applies the theory of change framework to selected case studies in order to develop further insights and recommendations for the GEF.

¹ <http://www.stapef.org/stap/wp-content/uploads/2016/05/RaptaGuidelines-A4-WEB-FINAL.pdf>

² <http://www.stapef.org/stap/wp-content/uploads/2015/03/CSIRO-STAP-Resilience-Adaptation-Transformation-Assessment-Framework-Report.pdf>

As outlined in this update to Council, over the balance of 2016, STAP will continue to invest in supporting development of the Integrated Approach Pilots (IAPs), and complete the implementation of our ongoing Work Program activities highlighted below. We will also continue to collaborate with our GEF Secretariat partners in defining how best science can support the development and implementation of multi-focal projects and initiatives such as the IAPs.

This report includes the following sections:

2. Observations on STAP's Screening of the GEF Work Program
3. STAP's Ongoing Contributions to the Integrated Approach Pilots (IAPs)
4. Resilience in the GEF Program
5. Source to Sea
6. Ongoing Work:
 - a) Green Chemistry - A holistic approach to curtailing Marine Litter from Plastics
 - b) Areas beyond national jurisdiction (ABNJ)
 - c) Wildlife trade and enforcement
 - d) Measuring, monitoring and evaluating adaptation
 - e) Mercury: Fate and movement
 - f) Assessing climate risk in GEF investments
 - g) Assessing multi-focal area projects and programs
 - h) Knowledge management – reviewing best practice for projects
7. Engagement with the Conventions
8. STAP Publications 2015/16

2. Observations on STAP's Screening of the GEF Work Program

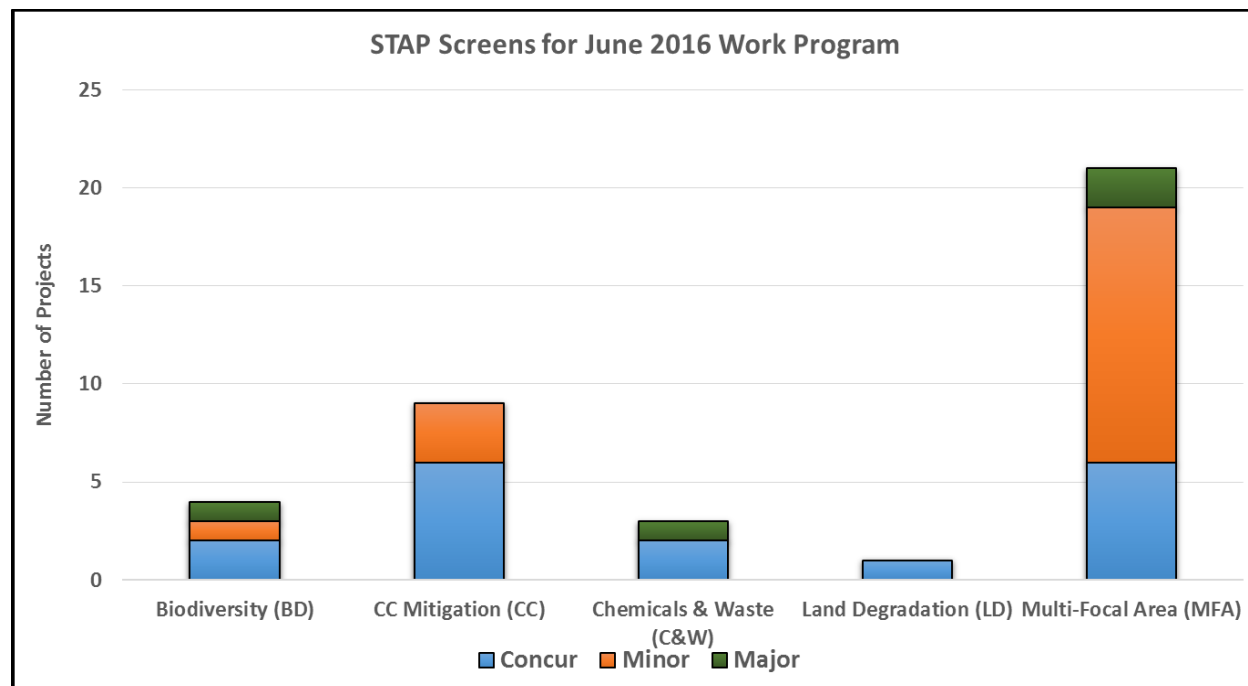
At the mid-point of the GEF-6 Program, STAP would like to provide Council with a number of overarching observations from STAP's screening of GEF Work Programs. STAP has noted in the past that project proposals at entry often make significant claims of future success, but frequently do not provide evidence or a clear logic pathway which would credibly support what is proposed. This continues to be the case in the work programs STAP has reviewed in GEF 6. Many projects do not support the intended workplan with evidence of critical analysis of lessons, including failures, from similar projects, that would suggest a reasonable level of confidence for success. While the majority of projects STAP reviews provide a detailed list of expected

activities and outputs, they often do not outline a theory of change to address underlying drivers and stated barriers, and provide a credible pathway forward.

In general, the knowledge strategy of projects which STAP reviews is weak. It is relatively rare for projects to reference the scientific literature. Few projects suggest credible uptake pathways for the knowledge generated and lessons learned over the life of the project, or how knowledge assets generated during the life of a project will be maintained after its completion. .

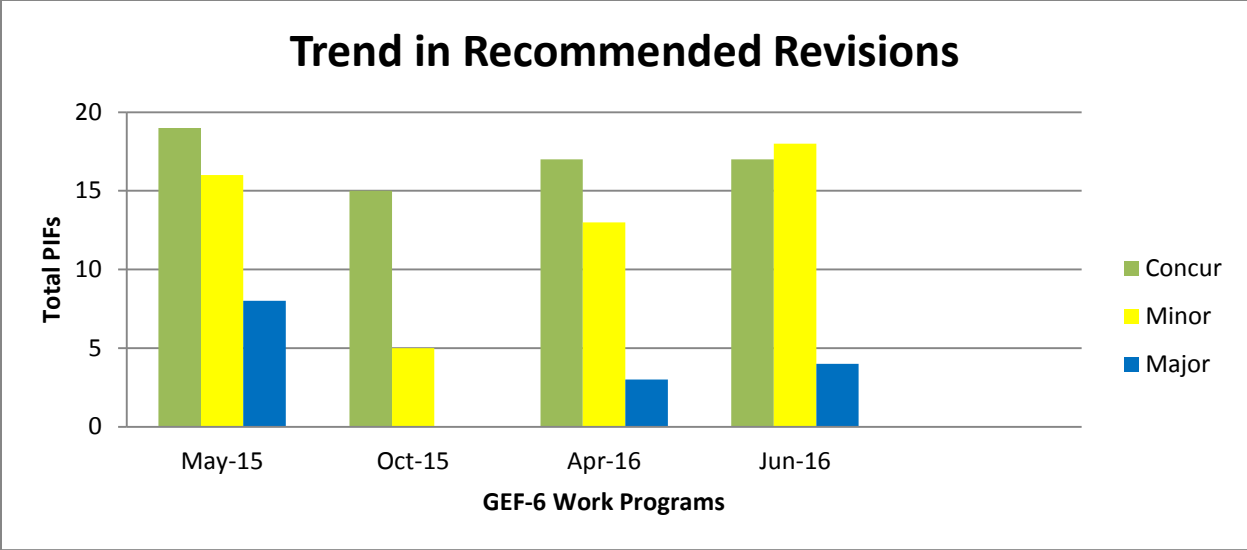
Regarding the recent Paris Agreement, STAP has noted that many climate mitigation proposals do not cite the relevant INDCs³ directly, and specifically the contribution of the project to achieving this commitment. It is early days, perhaps, to expect a significant shift in the focus of GEF projects to reflect these commitments. However, STAP will continue to keep this issue in the fore throughout the remainder of the GEF-6 project reviews.

Finally, the Panel notes that many projects suggest that success will be achieved through a variety of approaches such as “sustainable land management”, “payments for ecosystem services”, “empowerment of local stakeholders”, and “sustainable forest management” among others, while in general providing little indication of what precisely is entailed in these approaches and their implementation in the project at hand. STAP is cognizant of the challenges projects and Agencies face in these areas, and equally on how difficult it is to achieve lasting success in these areas⁴. However, STAP believes that projects should be more rigorous and take greater care to substantiate claims of future success.



³ Intended Nationally Determined Contributions

⁴ STAP has published on a number of these issues: <http://www.stapgef.org/publications/>



3. STAP’s Contributions to the Integrated Approach Pilots

a. Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa

The Resilience, Adaptation Pathways and Transformation Assessment (RAPTA) guidelines are now being piloted in the Integrated Approach Pilot on Fostering Sustainability and Resilience for Food Security in Sub-Saharan African (FSIAP). In March 2016, the Commonwealth Scientific Industrial Research Organisation (CSIRO) organized a workshop on the RAPTA guidelines⁵ in Addis Ababa, Ethiopia. The workshop used a hands-on approach to introduce participants to the science and principles underlying the concept of resilience, and the use of RAPTA project design guidelines in planning for resilience in the FSIAP/Ethiopia project. The project stakeholders were guided through development of a theory of change – identifying the project’s hypothesis and assumptions. This was followed by devising a description of the social, economic, biophysical, and governance properties of the social-ecological system, along with an assessment of the key controlling influences associated with future shocks and changes to the system. Based on this analysis, the participants identified opportunities for adaptation or transformation.

In workshop feedback, participants expressed appreciation regarding the benefits of the RAPTA process in facilitating project planning (e.g., theory of change) and advancing resilience concepts (via system description and system assessment), that helped them conceptualize specific interventions. The participants also noted that the application of RAPTA will require additional effort during project preparation, but that benefits accrue downstream in project implementation. Finally, the approach explicitly builds in flexibility in the project planning framework in order to adjust project plans during implementation, in alignment with principles of adaptive management.

⁵ The Resilience, Adaptation Pathways and Transformation Assessment” (RAPTA) Guidelines were commissioned by STAP, and co-written by CSIRO, STAP and UNDP. The guidelines are available at www.stapgef.org

CSIRO will be working closely with UNDP and STAP on RAPTA training and outreach exercises, as well as in disseminating results of the RAPTA pilot so that lessons can be garnered for the GEF, and its partners, on the application of resilience in practice.

b. Taking Deforestation out of Commodity Supply Chains

STAP contributed to the recent inter-Agency planning workshop in February hosted by WWF. The workshop was part of the process of developing the IAP and focused on putting in place a framework to ensure close coordination across the demand, production, transaction and learning child projects of the IAP. Participants worked together to develop a common understanding of the program's theory of change, appropriate indicators to represent different elements of the theory of change, and reflected on ways to integrate resilience and gender considerations in the program's design. Participants also discussed the ways in which the program could support the resilience of the underlying agroecosystems that support commodity production and ensuring that a mechanism is in place to measure results and learn from these interventions to inform future programs. STAP also prepared a review of indicators used to assess the sustainability of commodity agriculture production as a contribution to the M&E framework of the Program⁶.

STAP will continue to engage in the IAP going forward, particularly with regard to ensuring a robust and scientific theory of change for the individual child projects and the program; incorporating resilience into child project development and in the leaning and knowledge management components of the Program.

c. Sustainable Cities

STAP attended the First Meeting of the Global Platform for Sustainable Cities (GPSC), co-organized by the World Bank, the GEF and Singapore government and non-government partners, within the broader context of "Urban Week 2016", in Singapore from 7-11 March, 2016. Apart from the GPSC meeting, there was also the Singapore Urban Roundtable (to facilitate dialogue, understanding and exploration of future opportunities for collaboration among the World Bank, its clients and Singapore stakeholders), and the regional Launch of the World Bank's Competitive Cities Report.

The GPSC Meeting brought together around 30 subnational governments and 200 participants from both the IAP program, and other interested developed and developing nations for working meetings, high-level panel discussions, thematic learning sessions and field trips on issues such as the role of geospatial data in integrated urban planning, urban flood risk management, transit-oriented development, urban indicators and the integration of climate change resilience in urban planning. Lessons from Singapore's own urban planning experience in different fields were showcased, and there were working groups to facilitate exchanges of experience amongst countries. The preference for standardized vs indicators of choice has yet to be settled at the level of the child project, and the STAP remains engaged in seeing that indicators used at child project level will also have potential to feed into the Results Based Framework for the IAP.

⁶ See "[A Review of Indicators Used to Assess the Sustainability of Commodity Agriculture Production](#)".

4. Resilience in the GEF Program

As noted in the introduction to this report, STAP is pleased to have recently completed the report “Designing projects in a rapidly changing world: Guidelines for embedding resilience, adaptation and transformation into sustainable development projects (RAPTA Guidelines - Version 1.0)”. The RAPTA guidelines were written in a partnership involving the Commonwealth Scientific and Industrial Research Organisation, STAP, and UNDP. Future iterations of the RAPTA will follow based on the results from piloting the guidelines in the Food Security IAP, and in other contexts where the guidelines will be tested by CSIRO and the Stockholm Resilience Centre. Both UNDP and IFAD are now using the RAPTA Guidelines for planning projects beyond the Food Security IAP. STAP will continue to seek opportunities for further testing and development of RAPTA in GEF projects, and provide guidance to the GEF to strengthen resilience across its program based on the results and learning from these efforts.

Additionally, STAP recently drafted a brief on how to apply resilience in the GEF program. The brief is intended for GEF project managers and project developers, and guides the user through steps which are intended to embed the concept of resilience in project design.

5. Source to Sea

STAP has completed the scientific paper “Governing key flows in a Source to Sea continuum: A conceptual view and theory of change” in accordance with the STAP Work Program for GEF-6. The paper analyzes the evidence of degradation of ecosystems in a continuum from the source to the sea and illustrates a lack of system understanding of key flows that are connecting sub-systems at different spatial scales and the challenges of addressing these through existing governance and management approaches on land, the coastal zone, and in the marine environment. This paper (available at <link>) is the result of extensive consultations over a period of 18 months with the GEF partnership and beyond. STAP also drafted the GEF-focused guidance document on how GEF stakeholders should address key flows – defined in terms of water, sediment, pollution and material flows in the Source to Sea continuum, particularly related to governance and management arrangements. The inputs from the GEF International Waters community were received at a dedicated session at the International Waters Biannual Conference held in Negombo, Sri Lanka, on May 9th through May 15th, 2016. The GEF guidance document (available at <link>) with its key recommendations for program design linking terrestrial, coastal, and marine issues in a continuum will support the GEF partnership designing innovative programs and projects to address global commons in these interlinked areas.

6. Highlights of STAP’s Ongoing Work

a. Green Chemistry - A holistic approach to curtailing Marine Litter from Plastics

This work began in October 2015, and serves as a follow-up to the 2011 advisory document “Marine Debris as a Global Environmental Problem: Introducing a Solutions-Based Framework

focused on Plastics”⁷, where the Panel identified a strong intersection between three of the GEF’s Focal Areas in this effort - Chemicals, Biodiversity, and International Waters - including private sector engagement. This new area of work, will develop recommendations for the GEF Partnership on opportunities for future green chemistry and waste management solutions, with an eye to upstream interventions to identify material innovations and other approaches to curtail waste generation and ecotoxicological impacts to the environment, as opposed to merely focusing on the end-of-pipe solutions more commonly promoted. There is a focus on exploring naturally occurring polymers and specific material innovations being explored include: thermoplastic starch, polyhydroxyalkanoates (PHAs) and polyhydroxybuturate (PHB) which are biosynthesized and 100% biodegradable, as well as treatments of cellulose for packaging.

Many recent publications focus on technological solutions to enhance capture or recycling of plastics⁸. STAP’s work has highlighted several key flaws in pursuing this single focus in addressing plastics, and assuming that a circular economy without mitigation of the growth of plastics consumption will resolve this issue. Emerging data on the toxicity of plastic (due to the so-called plasticizer chemicals added in the process of production)⁹, as well as the recognition that plastics are now making their way into commercial fish species¹⁰, validates that plastics must be assessed economically and environmentally against alternatives.

In terms of partnership opportunities, STAP has been approached by a variety of private sector associations such as the Cruise Line International Organisation (CLIO), the Solid Waste Association of North America (SWANA), the International Solid Waste Association (ISWA) and government representatives particularly in Small Island Developing States about collaborations to pilot the production and/or use of sustainable materials in lieu of plastic (particularly packaging and single use plastics). In addition, STAP and their technical partner in this work, Think Beyond Plastic, were invited by the UNEP Caribbean Regional Coordinating Unit (UNEP- CAR/RCU) to their January 2016 “Meeting on Caribbean Marine Litter Strategy”. It was forecast that work would be completed in May 2016, but it is now expected that this report will be ready in time for the October 2016 Council Meeting.

b. Areas beyond national jurisdiction (ABNJ)

Over the reporting period, STAP completed extensive consultations along with a formal review process of the draft paper “Governance Challenges, Gaps and Management Opportunities in Areas Beyond National Jurisdiction (ABNJ)”. The paper reviews existing legal and regulatory regimes governing environmental protection in ABNJ, along with existing institutions and their mandates and

⁷ <http://www.stapgef.org/stap/wp-content/uploads/2013/05/Marine-Debris.pdf>

⁸ Eg. Ocean Conservancy and McKinsey Centre for Business and Environment (2015) “Stemming the Tide: Land-Based Strategies for a Plastic-Free Ocean” . Retrieved from <http://www.oceanconservancy.org/our-work/marine-debris/mckinsey-report-files/full-report-stemming-the.pdf> and World Economic Forum (2016) “The New Plastics Economy: Rethinking the future of Plastics”. Retrieved from http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

⁹ <http://www.niehs.nih.gov/health/topics/agents/endocrine/>

¹⁰ **Anthropogenic debris in seafood: Plastic debris and fibers from textiles in fish and bivalves sold for human consumption** by Chelsea M. Rochman, Akbar Tahir, Susan L. Williams, Dolores V. Baxa, Rosalyn Lam, Jeffrey T. Miller, Foo-Ching Teh, Shinta Werorilangi & Swee J. Teh. Scientific Reports 5, Article number: 14340. Retrieved from <http://www.nature.com/articles/srep14340>

assesses how these relate to emerging ABNJ issues (such as “Biodiversity Beyond National Jurisdiction” – BBNJ). In addition, the report provides a supplementary section with thoughts on the specific role of the GEF in this domain. Comments and suggestions on the paper were received from a wide range of institutions and experts working on ABNJ issues, including the GEF Secretariat and GEF Agencies (UNEP, WWF, and IUCN), the European Commission MARE Directorate, the Swedish Government, the International Seabed Authority, United Nations Division for Ocean Affairs and the Law of the Sea (UNDOALOS), World Ocean Council, and numerous experts in this domain. Similar to the S2S initiative outlined above, positive reactions and constructive feedback were also received from the GEF International Waters community at a session on ABNJ during the International Waters Biannual Conference held in Negombo, Sri Lanka. STAP will report on major recommendations of the scoping study to the 50th GEF Council, and plans to publish the study in time for the following GEF Council Meeting in late 2016.

c. Wildlife trade and enforcement

In February, STAP arranged for senior staff from the GEF funded Illegal Wildlife Trade (IWT) Program of the World Bank to participate in a regular meeting of the Rhino Specialist Group of the IUCN Species Survival Commission, held in Kruger, South Africa. At this meeting, STAP (with Dr Greg Stuart Hill from WWF Namibia and Dr. Holly Dublin) ran a one day workshop on communities and wildlife crime. This led to the STAP Biodiversity Panel Member presenting a webinar for the IWT Program organized by the lead agency and other participants on community approaches to combatting poaching and wildlife crime on 30 March. STAP was also invited to advise on the World Bank Mozambique initiative under the IWT Program. STAP also led a one day workshop on communities and wildlife crime during a planning meeting for this program organized by the World Bank, a few days in advance of the UNEA meeting in Nairobi, May 18 to 20.

d. Measuring, monitoring and evaluating adaptation

Climate change adaptation is a rapidly evolving field, and learning from early projects is essential to guide robust decision-making for increased climate resilience in developing countries. This will require the development of innovative monitoring and evaluation approaches which take into account the unique characteristics of adaptation planning in the face of uncertainty. At the end of 2015, STAP & PROVIA completed drafts of three technical papers addressing different aspects of M&E of climate change adaptation, including the following:

1. M&E and learning in a context of uncertainty
2. Climate change adaptation M&E across scales
3. Mainstreaming lessons from the broader development community

STAP has now commissioned a synthesis of these papers, which will expand upon the previous reviews to include the latest literature (e.g., reports, peer-reviewed publications) and products on adaptation M&E, in a manner tailored to the GEF needs. It is anticipated that this synthesis report will be completed and published at the end of August 2016. Below is the list of specific issues that will be highlighted in the synthesis report:

- The importance of M&E;

- The role of M&E for learning;
- The role of process indicators for M&E;
- The role of risk-taking and experimentation in adaptation;
- Descriptions and discussions of the spectrum of project-based M&E to M&E systems;
- Cross-scale climate change adaptation efforts, both temporally and geographically;
- Analysis of NAPA work/projects currently under implementation;
- Recommendations and reference guide on how to best monitor and evaluate adaptation.

It is expected that this report will specifically draw lessons for GEF policy and practice.

e. Mercury: Fate and movement

This area of work continues to progress as one of STAP's flagship activities with the chemicals conventions. Specifically, STAP has led efforts to explore the accessibility of reporting data to the chemicals conventions, and by extension to the GEF, for purposes of baseline analysis of projects and measurement of impact, in an effort to explore better ways at ensuring data and knowledge access for the new Minamata Convention. Collaboration with partners has highlighted the strengths and weaknesses in global mercury data, including the gaps that need to be addressed. Further, the information technology aspects of centralizing data on one platform through interface with several remote data sites, though challenging, holds real potential for improving efficiencies in how resources are deployed for baselining projects and measuring impacts.

The work on the Mercury Platform has continued with the Society of Environmental Toxicology and Chemistry (SETAC). The first major step in outreach was with experts from academia, UN agencies and the private sector to the 11th SETAC Europe Special Science Symposium (SESSS Brussels, October 20-21, 2015), which explored how science, bio-monitoring and policy can be integrated for successful implementation support to UNEP and the Minamata Convention on Mercury. More specifically, the workshop sought to facilitate: 1) interoperability of mercury databases and dissemination of information (not limited to data) to a variety of stakeholders, and 2) establishment of characteristics and operational aspects of technical, policy/government and public Communities of Practice (leading ultimately to ToRs for establishment and governance of the Communities).

During the workshop, the Interim Minamata Secretariat was able to share updates of INC-6¹¹ and to highlight key issues to be considered at INC-7 related to accessing quality monitoring data. It was agreed that the STAP work should focus on the technical, and then Parties can decide how it can be utilized to support decisions. The UNEP Mercury Partnership Fate and Transport Working group has now included this work into their business planning. Data on mercury levels in commercial fish species globally will be used as a pilot in the first phase of work.

The workshop included working sessions on inter-operability of key mercury databases with UNEP Live. Representatives of the WHO expressed interest in participating, since it would be a way to juxtapose mercury levels in humans with that found in air, water and fish eaten by a given population (See Figure 1). The workshop also saw a working group begin to frame out a future

¹¹ Intergovernmental Negotiating Committee – Minamata Convention on Mercury

code of conduct and TORs for Communities of Practice to help devolve various subsets of work needed to complete the work on the Platform (e.g., a group to look at Gaps and Needs of data, and work out data streamlining protocols).

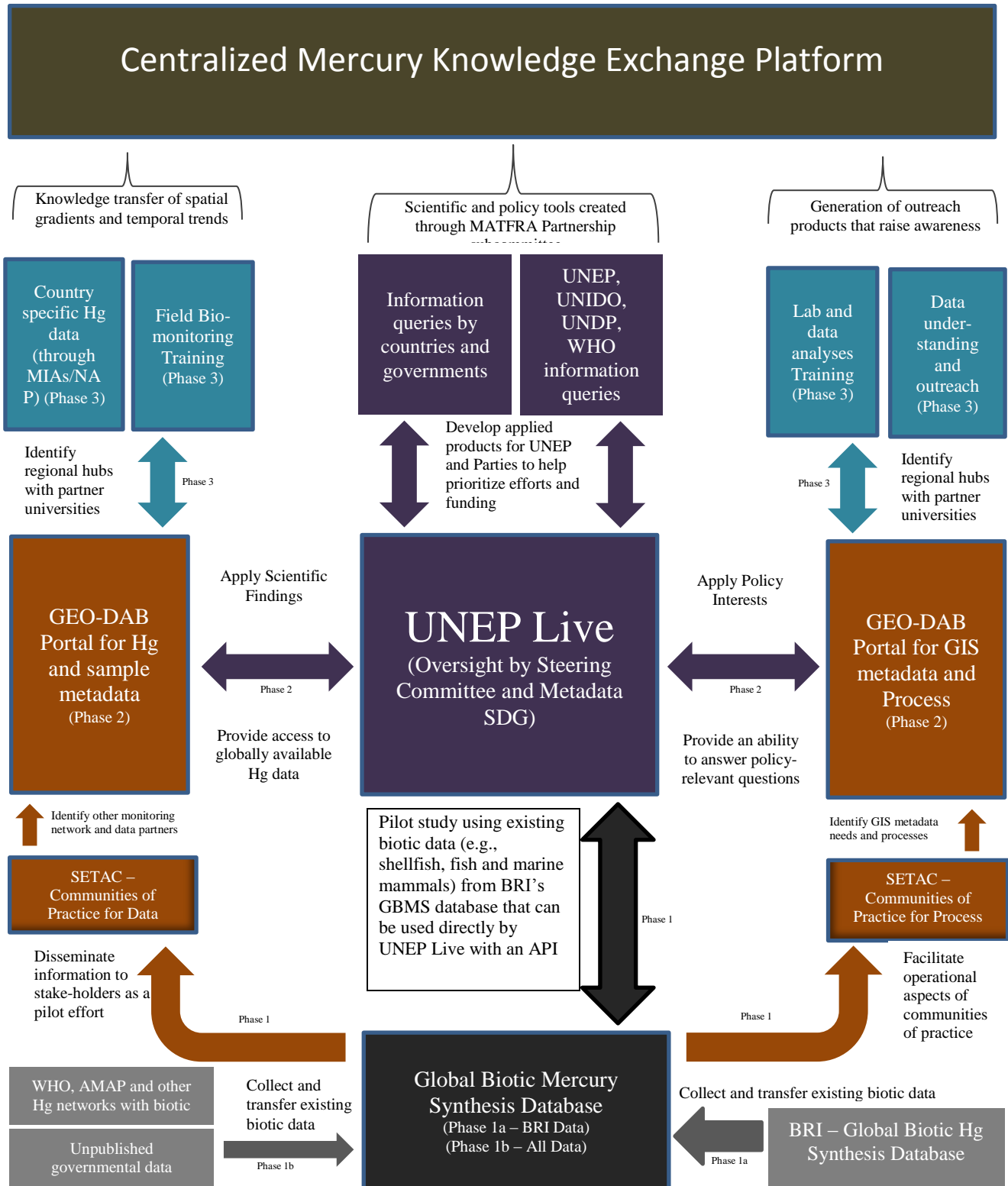
STAP has continued with the workplan outlined in its last report of the Council, namely:

- Launching of a multi-part survey (Context, Mercury Knowledge Needs/Wants, Data Sharing and Communities of Practice) of more than 1000 specific scientific partners encompassing surveying across UN and SETAC global networks - April 8 to May 6, 2016¹²;
- Ongoing identification of key data providers and any other complimentary data/assessments/publications that can be mapped or highlighted to ensure links to mercury data bases and other complimentary resources through Partners via UNEP Live;
- Ongoing categorization of information types and the conditions for information sharing set out by business owners that must be respected in the process (including what is open source and where there may be financial/legal ramifications for data sharing);
- Ongoing identification of those most prepared to commit to various roles in the centralized partnership that will underpin the Mercury Platform (eg data provision, streamlining of data protocols, leading Communities of Practice).
- Working with UNEP Live and partners as appropriate to create the required application programming interfaces (APIs) for the various types of information to be shared within the platform.

Finally, an IT “wire diagram” to start charting out data flows and potential ways to interface with various data hosting sites has begun development, and a workplan to finalize uptake of the BRI data is being developed with UNEP Live to update the interim staging portal for the Mercury Platform. As can be seen in Figure 1, Phase 1 of the platform set up (see appropriately labelled arrows) has focused on the Global Biotic Mercury database, and ways to get this and associated Communities of Practice portals set up on the UNEP Live platform. A beta version of the UNEP Live mercury portal has been established and is being tested. Subsequent phases 2 and 3 indicate additional databases and country partners that could be added, and the potential data broker and interface modalities that may be required to allow UNEP Live to reflect real time data held on remote sites.

¹² Generic link to view the survey at <https://www.surveymonkey.com/r/9NGVTMX>. The survey contains 56 questions answerable in about 20 minutes. Awareness advertising for the survey was done at INC7. To date, 400 responses have been received. Also, WHO has indicated they are interested and willing to collaborate around data access.

Figure 1 – Centralized Mercury Platform Schematic (includes Phase 1 and potential database linkages for follow-on phased work)



f. Assessing climate risk in GEF investments

Mainstreaming climate resilience across GEF operations has been requested by Council in 2010, yet has not been fully integrated. A first logical step towards meeting this objective will be to ensure climate risk assessments are done rigorously and systematically for all GEF projects, using the relevant climate information. While there is a large amount of climate information available to the global community, it is often not used appropriately in the assessment of climate risks. Several concerns have been raised regarding climate data usability, trust of end-users in the data, and a perceived lack of technical and financial capacity to conduct adequate climate risk analyses. When climate information is used to guide the design of GEF projects, the data selected is often misinterpreted or of poor quality¹³. In addition, climate risk assessments are often done for the duration of the project implementation, rather than for the timeframe of expected environmental benefits.

In order to address these issues, STAP is partnering with the World Bank Climate Change Group to evaluate climate data visualization tools, as well look at technical guidelines for the use and interpretation of climate information. Finally, STAP intends to develop in parallel an advisory document describing the criteria for what would be considered a “good” or “adequate” climate risk assessment to be presented at the PIF stage versus the PPG stage, and to be completed by the end of 2016.

g. Assessing multi-focal area projects and programs

The number of multiple focal area (MFA) projects continues to increase, which the Panel believes is a positive trend, but it does pose additional complexities in reviewing projects to determine multiple outcomes. To support project developers in designing MFA projects, STAP developed a preliminary framework for assessing new MFA initiatives that it can use for project screening. This review framework encourages a systems-thinking approach while also encouraging the following attributes in MFA PIFS:

1. A well-defined objective that can only be supported by integrating two or more focal area objectives;
2. A good description of the key relationships between the common drivers of environmental degradation in order to define the system functions (e.g., social, economic, biophysical, and governance variables and their interactions);
3. Description of the multiple stakeholders required to assess the problem(s)/identify appropriate interventions, and a description of how their combined roles will contribute to reporting on multiple global environmental outcomes; among other elements.

For MFA projects, STAP also encourages project planning principles (that are actually applicable to all projects), such as: a clear and coherent proposed theory of change; the evidence base; lessons learned from similar GEF (and non-GEF) projects and how these lessons inform the design of the current project. STAP looks forward to continuing to engage with GEF

¹³ This is based on a preliminary analysis of 25 PIFs and 17 full project documents, including Annexes, for the LDCF.

Secretariat and Agency colleagues on refining the guidance for the design of future MFA projects, which it considers an important mechanism for achieving multiple benefits across sectors and scales. STAP is contributing to a GEF Secretariat-led working group to further refine this guidance.

h. Knowledge management – reviewing best practice for projects

The initiative to prepare a report addressing “Practitioner Guidance on Mainstreaming Knowledge Management in the Design of GEF Projects and Programs” is now moving ahead. An inception meeting with consultants was held in May 2016 with the agreed completion date in December 2016-January 2017. The delay compared to the initial plan was caused by the extension of the tendering process due to a lack of suitable candidates in the first round of selection. The overall purpose of this effort is to develop guidance on best practices for project managers on how to manage and make best use of knowledge assets developed during project implementation. The work strategy includes extensive consultations with GEF’s key stakeholders, including recipient and donor countries culminating in the final workshop to discuss and adopt the practitioner guidelines. STAP will be using the outcomes of this work in preparing the section on knowledge management in the forthcoming GEF-6 STAP Assembly Report.

7. STAP’s Engagement with GEF-related Conventions

CBD SBSTTA 20

Jointly with the CBD Secretariat, STAP organized a side event at the CBD SBSTTA 20 entitled “Plastic debris in the ocean: From evidence to preventive action” on April 26th 2016 in Montreal, Canada. The event informed CBD parties and other stakeholders about the current state of knowledge, lessons learned in prevention and mitigation, and common and scalable solutions to address the impacts of plastic debris on marine and coastal biodiversity and habitats. The side event supported directly background document prepared for CBD SBSTTA 20 participants “Marine Debris: Understanding, Preventing and Mitigating Significant Adverse Impacts on Marine and Coastal Biodiversity (UNEP/CBD/SBSTTA/20/INF/9). Speakers included representatives from CBD parties and SIDS, UNEP, STAP and the Global Alliance for Incinerator Alternatives (a global NGO).

7th session of the Intergovernmental Negotiating Committee on Mercury (INC-7) (Jordan, 10-15 March, 2016)

The STAP has been seeking to deepen its engagement with the Minamata Convention Secretariat and the UNEP Mercury Partnership (see above). As such, Convention partners asked STAP to attend INC-7, and incorporate STAP’s work into the business plan of the UNEP Mercury Partnership Fate and Transport Working Group. One of the co-chairs of this working group, Dr. Dave Evers, Executive Director and Chief Scientist of the Biological Research Institute (BRI), is also one of the lead partners in STAP’s ongoing partnership with SETAC. Taking advantage of these synergies, the UNEP Chemicals coordinator of the UNEP Mercury Partnership, with support from the Interim Secretariat of the Minamata Convention, invited STAP to participate

and present in a key side event on Mercury Monitoring, as well as to observe the UNEP Mercury Partnership meetings ahead of the INC opening.

The side event was entitled "Mercury monitoring: what do we know and what can we do." The Air Transport and Fate Research Area of the UNEP Global Mercury Partnership has been working on the development and coordination of such networks and programmes since 2007. The review of existing monitoring capacity undertaken within a GEF project implemented by UNEP provided important context. In order to contribute to the global efforts to develop and improve global monitoring systems, the side event sought to explore case studies from existing monitoring networks and initiatives, and discuss ways forward to coordinate such efforts. It was in this context that the work led by the STAP was show cased.

STAP was represented by our Chemicals Panel Member, who presented on ways in which key global databases could be interfaced to UNEP Live. This was complemented by Dr. Evers on progress to date in representing biotic mercury data (specifically mercury levels in global fish stocks) on the demonstration UNEP Live site, and the potential ways in which data from one source could be displayed, shared and juxtaposed against the data of others.

UNCCD/CBD meeting on SDG indicator 15.3

Two STAP members participated in a UNCCD/CBD meeting on developing indicators for the Sustainable Development Goal target 15.3 aimed at reversing and halting land degradation trends. The meeting was held on 25-26 February 2016 in Washington, D.C.

The participants agreed that the three sub-indicators used by the UNCCD (land cover/land cover change, land productivity and carbon stocks above and below ground) along with indicators that can be assessed at the national and sub-national level can provide the data to monitor the indicator for target 15.3 "proportion of land that is degraded over total land area". Appropriate metrics and data sources were identified, and supporting indicators and data were suggested, to supplement these, and assist in interpretation of results and planning of interventions at national level.

CBD SBSTTA 19 Side Event on Measuring the Socio-Economic Effects of Protected Areas

In collaboration with the GEF Secretariat, STAP organized a side event at SBSTTA on the challenges of accurately measuring the socio-economic effects of protected areas (PAs). The session was a briefing on past STAP work in this area and efforts to develop an action-oriented guide to support design of GEF PA projects to measure and increase socio-economic benefits, in addition to global biodiversity benefits. The methodology must be relatively low-cost, and general enough to be widely applicable across a variety of contexts, but with enough detail to provide data that can be compared across parks, countries, and regions. Ultimately, the goal is to generate an easily applicable monitoring tool to track the impact of PAs on the local and national economy, along with regional and global resource flows.

STAP is working to test a number of approaches for measuring the socio-economic effects of protected areas in field work being undertaken in Zambia over the coming months, and will develop guidance for GEF Agencies on recommended approaches. This effort is meant to address the recommendation from the recent evaluation of the GEF's PA management

interventions, calling on the GEF to expand benefit-sharing across a wider cross-section of local populations, and better mitigate the distribution of costs and benefits with the aim of reducing local pressures on biodiversity.

8. STAP Publications 2015/16

During the current year, STAP completed the following Work Program reports and advisory documents:

STAP 2015. Optimizing the Global Environmental Benefits of Transport Biofuels. Scientific and Technical Advisory Panel of the Global Environment Facility, Washington, DC. Authored and edited by Bierbaum R., Cowie A., Gorsevski V., Sims R. (STAP); Rack M., Strapasson A., Woods J. (Imperial College, London) and Ravindranath N. (Indian Institute of Science, Delhi). GEF/STAP/C.48/Inf.02.

Sims, R., Gorsevski, V., and Anenberg, S. 2015. Black Carbon Mitigation and the Role of the Global Environment Facility: A STAP Advisory Document. Global Environment Facility, Washington, D.C. GEF/STAP/C.49/Inf.02.

O'Connell, D., Abel, N., Grigg, N., Maru, Y., Butler, J., Cowie, A., Stone-Jovicich, S., Walker, B., Wise, R., Ruhweza, A., Pearson, L., Ryan, P., Stafford Smith, M. (2016). Embedding resilience, adaptation and transformation into project design: Guidelines for application of RAPTA (1.0). Global Environment Facility, Washington, D.C. GEF/STAP/C.50/Inf.02.

Henry, B. and Murphy, B. (2016). Sustainable land management and its relationship to global environmental benefits and food security: A synthesis report for the GEF. Global Environment Facility, Washington, D.C. GEF/STAP/C.50/Inf.03.

Rasmussen, L., Agrawal, A., Oldekop, J. (2016). A review of indicators used to assess the sustainability of commodity agricultural production. Global Environment Facility, Washington, D.C. GEF/STAP/C.50/Inf.04.

Planning for Integration: Addressing multiple benefits at project identification stage and in project design (2016). STAP white paper. Global Environment Facility, Washington, D.C.

Building resilience thinking into the GEF Program (2016). STAP white paper. Global Environment Facility, Washington, D.C.