

# Scientific and Technical Advisory Panel

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

### Introduction

I am pleased to provide an update on STAP's progress in implementing its work program along with specific highlights and recommendations it wishes to bring to GEF Council's attention. The report covers the period since STAP's last report to the Council in November 2013 until the present.

This report includes the following:

- 1) Highlights from the STAP Report to the 5<sup>th</sup> GEF Assembly
- 2) Summary of the Evaluation of the STAP – GEF Overall Performance Study (OPS);
- 3) STAP Retreat on Strategic Planning
- 4) STAP's observations based on screening of GEF projects in the work program
- 5) Strengthening the efficiency and effectiveness of STAP's screens in GEF-6;
- 6) STAP Advisory Reports and Workshops:
  - a. Mainstreaming biodiversity in production sectors
  - b. Terrestrial protected areas (PAs) and effects on human well-being
  - c. Political economy of regionalism in international waters
  - d. Marine spatial planning in practice
  - e. GEF CEO Innovation Forum on ICT
  - f. Improving understanding of mercury in the environment
  - g. Roundtable on mainstreaming adaptation
- 7) Upcoming activities:
  - a. Black carbon
  - b. Biofuels for climate change mitigation
  - c. Sustainable urbanization
  - d. Agro-ecosystem resilience
  - e. Supporting National Adaptation Plans and adaptation monitoring & evaluation
- 8) STAP engagement with conventions
  - a. UNCCD, UNFCCC, CBD – Agro-ecosystem resilience workshop

### 1) STAP Report to the 5<sup>th</sup> GEF Assembly

The STAP report to the 5<sup>th</sup> GEF assembly (*Delivering Global Environmental Benefits for Sustainable Development*<sup>1</sup>) is a companion document to this report. The Assembly report presents a vision for the GEF that emphasizes its role in fostering sustainable development, and where STAP can contribute to

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<sup>1</sup> <http://www.gefassembly.org/gef-assembly/5th-assembly>

fulfilling this vision. The Report argues for an approach where the generation of GEB's is fundamentally integrated within a sustainable development framework. STAP notes that this is synergistic with the GEF Vision 2020, and in particular, welcomes the Integrated Approaches as a concrete step towards realizing this vision. The key messages from the STAP report are:

- **Environmental degradation must be tackled in a more integrated and holistic mode**, addressing individual focal area concerns in ways that yield multiple benefits, enhance ecosystem services, and improve governance systems within and across national boundaries.
- **Sustainable development should be at the core of GEF interventions**, enabling improved human well-being, health, livelihoods and social equity at the same time as environmental protection.
- **The GEF should continue to be catalytic and innovative** while actively seeking to effect permanent and transformational change. This will require effectively leveraging the best scientific knowledge from the design of projects through implementation and evaluation, as well as learning from the experiences of past interventions through effective knowledge management.

These findings are complementary and consistent with the program strategy for GEF-6, the GEF-2020, and the results of the replenishment process. As we move forward in GEF-6 and beyond, STAP believes it has a comparative advantage in achieving this vision by contributing to the following:

9) ***Metrics and Indicators of Success:*** *STAP's specific role in the GEF RBM Framework could include technical support to the GEF partnership in the development of cross-focal area indicators that would reflect the increasing integrated nature of GEF Programs, and ensure their alignment with the emerging sustainable development goals.*

10) ***Knowledge Management:*** *In addition to STAP's strategic role in helping to shape the knowledge strategy of the GEF, its comparative advantage in KM includes the following elements:*

- (i) Conducting targeted assessment and research at the portfolio level to address key knowledge gaps in the GEF program, and assessing whether the sum of projects in focal areas are delivering lasting impacts at objective and goal level;
- (ii) Using experimental project design to evaluate environmental and social effects of project implementation. These projects would be designed to permit credible inferences to be drawn about whether the program is contributing to changes in the status and trends of the indicators. Experimental project design will contribute to the GEF's understanding about what works to achieve its environmental goals, and the conditions under which this can be achieved;<sup>2</sup>
- (iii) Leveraging the knowledge base from the existing repository of GEF projects; and
- (iv) Enhancing knowledge exchange platforms, learning networks, and communities of practice through facilitating greater involvement of outside scientific partners in areas of strategic importance for the GEF.

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<sup>2</sup> For further details about STAP's policy on experimental project designs, refer to: Ferraro, Paul J. (2012). Experimental Project Designs in the Global Environment Facility: Designing projects to create evidence and catalyze investments to secure global environmental benefits. A STAP Advisory Document. Global Environment Facility, Washington, D.C.

- **Program Integration:** *In addition to the current Integrated Approaches, a number of areas for future integrated GEF programming where STAP could assist are emerging as potential candidates:*
  - a. Resilience of socio-ecological systems;
  - b. Characteristics of successful long-term adaptation, including ecosystem based adaptation; and
  - c. Environmental security.

## **2) STAP Retreat on Strategic Planning**

In January of this year STAP held a retreat at the Stockholm Environment Institute, the home institution of STAP's Panel Member for International Waters, to strategize how to amplify the impact of the GEF as it enters its sixth phase. Through its unique role that relies on science to develop advice at the policy and project level, STAP believes it is well-placed to assist the GEF improve its impacts on the global environment. The Panel addressed the following key issues:

- i. Integration across Rio Conventions on common areas of scientific interest;
- ii. Development and use of experimental project design approaches at the project level to address untested assumptions in the GEF Program (e.g. does Certification deliver tangible biodiversity benefits?);
- iii. Promoting evidence-based decision making in the GEF when developing new strategies or operational processes;
- iv. "Mining" of potentially valuable data and lessons that exist in the GEF's repository of completed projects;
- v. Tracking of results across GEF multi-focal area approaches and integrated programs; and
- vi. Collaborating with the GEF Secretariat to harmonize the current screening process to minimize overlap and avoid diverging recommendations to the Agencies.

The retreat discussion was rich and varied, resulting in a number of key decisions and outcomes:

- ✓ STAP Agreed to develop a forward thinking paper on the GEF's role in sustainable development for presentation to the GEF Assembly, building on its paper to the First Replenishment Meeting – *Enhancing the GEF's Contribution to Sustainable Development*<sup>3</sup>. The Report includes discussion on the scientific underpinnings of the Integrated Approaches and other cross-focal topic areas.
- ✓ In addition to focal area responsibilities, the Panel decided to collectively work on a number of strategic issues during GEF-6, including, *inter alia*,
  - Sustainable Cities;
  - Taking Deforestation out of Commodity Supply Chains;
  - Sustainability and Resilience for Food Security;
  - Climate Resilience – Considerations and risks in the GEF-6 Program;
  - GEF's contribution to the broad theme of environmental – exploring the role of GEF projects and programs in improving regional and national security and reducing risk;

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<sup>3</sup> [http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.R.6.Inf\\_03\\_STAP%20Paper.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.R.6.Inf_03_STAP%20Paper.pdf)

- Collaborating with agencies on a sustainable land management and marine spatial planning initiative to address the issue of water and related flows from “source to sea”; and
  - The potential for a book on the “*Global Commons*”, addressing the GEF’s unique niche in this area.
- ✓ Develop a comprehensive communication strategy for STAP, and identify the necessary resources or support to implement it; and
  - ✓ Hold all future STAP Meetings in conjunction with GEF Council Meetings to improve engagement between the Panel and Council.
  - ✓ Review and propose revisions to STAP’s operational role in the project cycle in GEF-6 (see further discussion of this in the following section of this report on the GEF OPS-5 findings).

Since the retreat, the Panel has already initiated work on a number of these areas.

### 3) Summary of the Evaluation of the STAP: GEF Overall Performance Study (OPS)

The review of STAP in OPS-5 concluded that “...STAP remains a useful and respected body that has made substantial contributions to the functioning of the GEF and great strides since its inception ...” that continues to successfully deliver on many of the growing number of functions and responsibilities that it is assigned<sup>4</sup>. However, there is room to enhance the effectiveness and efficiency of STAP in delivering its core mandate in GEF-6. The report from OPS-5 tabled to Council highlighted a number of key findings:

- a. **Formulation of clear priorities is critical in the context of increasing demands.** The STAP balances time and resources between its role in providing advice on long-term strategic issues and its role in reviewing GEF projects at entry to ensure scientific and technical quality. Beginning with the Panel Meeting in Cancun, STAP has begun the process of considering views and formulating priorities that incorporate input and analyses from within the GEF family to further sharpen STAP’s strategic focus and strengthen its effectiveness.
- b. **“Science” and its role within the GEF should be clearly defined.** The evaluation found that there is no shared understanding on the role of science in the GEF Program. The social sciences, moreover, are playing an increasingly prominent role in the design and implementation of GEF projects. Building upon this recommendation, along with previous STAP work on the role of research in the GEF program including experimental project design, the Panel will engage with GEF stakeholders and work to define the role of science within the GEF program that is pragmatic, integrative, and adds value to the work of the GEF.
- c. **Strategies to improve knowledge management need to be developed and applied.** Opportunities to increase knowledge flows in the GEF program are numerous. While this is a

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<sup>4</sup> Lele, U. (2013). OPS5 technical document #15: evaluation of the Scientific and Technical Advisory Panel (STAP) of the GEF. Fifth Overall Performance Study. Global Environment Facility Evaluation Office, Washington, DC.

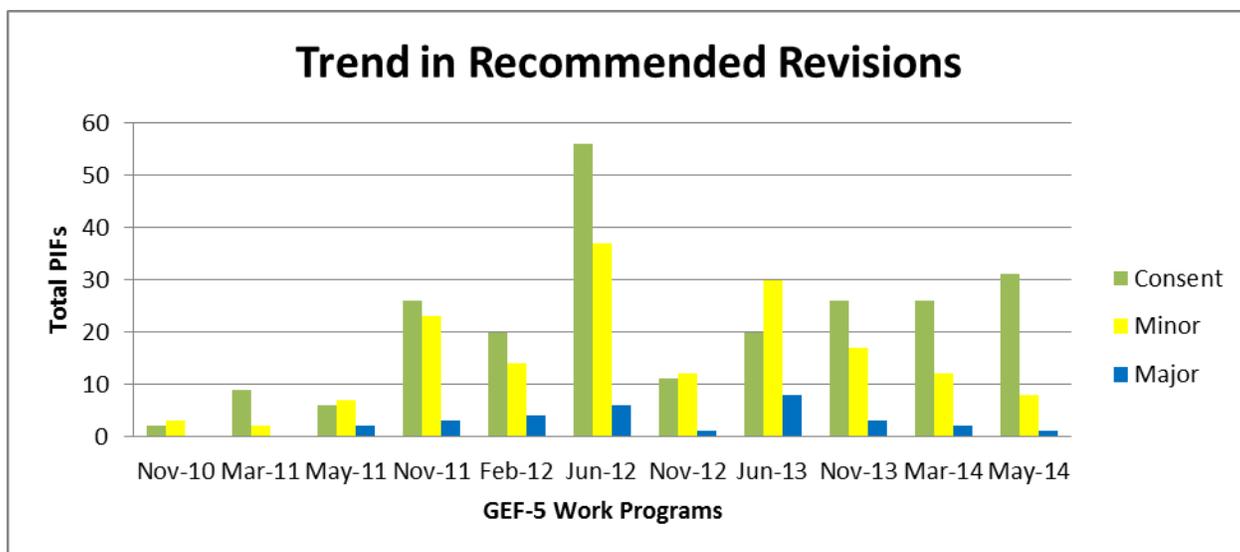
shared responsibility within the GEF partnership, STAP can play an important role – for instance in identifying key focal area or cross focal area objectives for future programs. Concomitantly, the use of research and experimental project design (as noted above) has largely been overlooked as modalities for project-based knowledge generation – representing a significant missed opportunity to build bridges between the scientific and practitioner communities within the GEF program. These and similar approaches, STAP believes, will greatly assist GEF stakeholders to both learn from each other and contribute to pushing the boundaries of science, improving the delivery of future global environmental benefits and sustainable development.

The OPS-5 findings therefore outline key opportunities to improve the ability of the STAP to fulfill its core mandate. The OPS report also concluded that the STAP needs to be provided with the “...necessary resources to increase its effectiveness”, given its growing number of responsibilities and functions.

#### **4) STAP’s observations based on screening of GEF projects in the work programme**

STAP notes that a scientific and technical review at PIF stage requires well referenced information that Agencies may not consider is warranted or feasible to provide at such an early phase of project development. At times this leads to a sub-optimal outcome in the screening and review process. Over the coming months as the GEF Project Cycle is revised, STAP recommends that all parties concerned in the review of new projects agree on a common understanding of information required at PIF stage. Typically, however, STAP reserves the advisory response of “major revision” only for those PIF’s which lack some essential elements – such as a clear definition of how the project will deliver global environmental benefits or a well specified logic model that links activities to outputs and outcomes. Finally, the Panel has noted a variation in the quality of PIFs across Agencies.

STAP will be recommending some amendments to the screening process going forward, pending the outcome of dialogue with GEF Secretariat and GEF Independent Evaluation Office (see Section 5 below). This will include capturing information gained at mid-term review and final reviews, looking across focal area portfolios to determine if the sum of the projects is creating lasting outputs and impacts, help develop ways to evaluate success of multi-focal projects, and assist in the design of work under the new Integrated Approaches.



#### 5) **Strengthening the efficiency and effectiveness of STAP's review function in GEF-6**

As noted in Section 3 above, the review of STAP in OPS-5 emphasized the importance of formulating priorities between the STAP's role in advising the GEF on long-term strategic focus and its role in screening projects to ensure scientific and technical quality. STAP noted that the increasing number of multi-focal projects, along with Integrated Approaches, may require a revised screening methodology to be of maximal value to the GEF. The Panel agreed that while the principle of independent peer review is beneficial, STAP screens may serve limited purpose in certain cases, such as when projects do not draw upon novel technologies or approaches, or are not based on particularly challenging or unique scientific or technical considerations. The Panel also proposed that some selected projects be reviewed against initial STAP advice at the time of CEO endorsement. Finally, STAP believes that a scientific assessment of some selected projects during the mid-term and final project evaluations, in conjunction with the efforts of the Evaluation Office, would greatly assist the process of capturing learning from project investments.

Regarding project screening at entry into the work program, the Panel has proposed to adopt a more selective and strategic approach towards project review, based upon the following criteria (currently under review) where projects:

- a. Supports intervention approaches or technologies that are being piloted and are novel within the field or to the GEF;
- b. Focus on a thematic area that is new to the GEF and can help in addressing scientific and policy gaps;
- c. Specifically address a pilot theme designed as an Integrated Approach; and
- d. Demonstrate complex and innovative integrated approaches (e.g., multi-focal area projects or programmatic approaches).

In addition, the Panel proposed the following criteria to identify projects for screening:

- a. As the work program is being assembled by the GEF Secretariat, the GEF Secretariat and/or GEF Agencies will identify projects that would benefit from a STAP screen based on the criteria identified above.
- b. The STAP will assess the GEF work program once constituted, and identify projects (in addition to pre-selected project from point “a” above) that warrant a review by the STAP.
  - i. For projects financed by the Special Climate Change Fund (SCCF), the GEF Secretariat and STAP will identify projects that merit further scrutiny by STAP during the PIF pre-selection process that recommends developing the concepts for the work program.
  - ii. For projects financed by the Least Developed Countries Fund (LDCF), the GEF Secretariat and STAP will monitor the rolling work-program for technically challenging projects.
- c. Once the work program is posted on the GEF website (or circulated electronically in the case of LDCF projects), Members of the GEF and LDCF/SCCF Councils may also exercise their prerogative to identify additional projects they specifically wish the STAP to review.

STAP will work with the GEF Secretariat and Agencies to chart a way forward to both finalize and implement these reforms. In addition, in the upcoming year the STAP also intends to work closely with the GEF Independent Evaluation Office and GEF Secretariat to consider two related issues, specifically: (i) a monitoring system to assess the impact of STAP screens on project design and implementation, and (ii) improved harmonization of STAP and GEF reviews. These discussions will begin in Cancun, and STAP looks forward to engaging with the GEF Partnership on these proposals.

## **6) STAP work programme activities and products**

### **a. Terrestrial protected areas (PAs) and effects on human well-being<sup>5</sup>**

Although PAs have historically been among one of the most common and successful interventions to address biodiversity conservation goals, there is an ongoing debate within the scientific community about their net impact on human well-being at local and regional scales. To better understand the evidence base underlying this debate, the STAP commissioned an extensive and systematic literature review of impacts of PAs on livelihood strategies, social capital, empowerment, human rights, and access to ecosystem goods and services. Published in May 2014, the study concludes that the impacts of PAs on these variables are highly context dependent, and can be positive, negligible, or negative. This in turn appears to be due to the fact that there is poor streamlining of methodology surrounding establishment and management of protected areas, making it difficult to supply the GEF with straightforward advice for decision-making on how to maximize positive impacts, though it was possible to advise on critical elements that should be incorporated into the research design and reporting for protected area projects, so that streamlined approaches can better yield information on the impacts of protected areas on human well-being. The Global Environment Facility (GEF) has successfully supported projects designed to establish and manage PAs, buffer zones and biological corridors over the past two decades. Similar analytical approaches could be applied to the GEF portfolio of completed protected area projects. Doing so could lead to the development of a streamlined methodology for PA projects in the GEF portfolio to be tested in

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<sup>5</sup> Pullin, A.S. et al. (2014). 'Assessing the Effects of Terrestrial Protected Areas on Human Well-being: A STAP Advisory Document'. Global Environment Facility, Washington, D.C. <http://www.stapgef.org/assessing-the-effects-of-terrestrial-protected-areas-on-human-well-being/>

GEF-6, with the goal of improving of these projects address co-benefits in sustainability of terrestrial protected areas.

### **b. Mainstreaming biodiversity conservation in production sectors<sup>6</sup>**

As the land surface available for protected areas becomes smaller and more fragmented, mainstreaming biodiversity conservation within human development has emerged as an internationally recognized and supported conservation approach. In October 2013, the STAP convened a workshop of 35 senior project implementers and researchers<sup>7</sup> to assess lessons learned over the last 10 years, during which the GEF has invested US\$1.6 billion in biodiversity mainstreaming projects. The recent STAP publication “Mainstreaming Biodiversity in Practice” presents three products from the workshop: a critical literature review of the evidence base on mainstreaming project outputs and outcomes, a synthesis of workshop discussions, and abstracts of the papers presented at the workshop. The final document provides a ‘state of science’ summary of the structure, content and effectiveness of mainstreaming interventions, including numerous findings such as:

- Much of what we have learned about successful mainstreaming has come from detailed science-based assessments in both biophysical and socio-economic domains – but such research must be policy relevant to achieve full impact;
- Mainstreaming is not a controlled experiment, but often a social exercise in changing attitudes and perceptions of key stakeholders. However, it is a rapidly emerging field which is deserving of more systematic inquiry;
- Good governance and strong institutions are key determinants of mainstreaming success;
- In most cases, trade-offs between desired conservation outcomes and desired social outcomes are necessary. These trade-offs should be clear at project onset.

### **c. Political economy of regionalism in international waters**

There is increasing recognition within science and policy communities that transboundary freshwater and ocean resources require collective regional action to effectively manage and supply public and private goods, and that this action and its outcomes are strongly influenced by the nature of the region’s political economy. In May 2014, the STAP published a report<sup>8</sup> that identified characteristics of regional political and economic organizations and frameworks that contribute to successful collective strategies in this domain, and provided recommendations for how future GEF interventions can enhance regional coordination. The report was based on a comprehensive review of academic literature, GEF policy documents and terminal evaluations, and key substantive outcomes from an Expert Workshop<sup>9</sup> and ICW7 Roundtable<sup>10</sup> that the STAP convened in June and October 2013 respectively. The findings of the report highlight the benefits that functioning regional organizations and frameworks can deliver enhanced

<sup>6</sup> Huntley, B.J and Redofr, K.H. (2014). ‘Mainstreaming biodiversity in Practice: a STAP advisory document’, Global Environment Facility, Washington DC. <http://www.stagef.org/mainstreaming-biodiversity-in-practice/>

<sup>7</sup> Held in Cape Town, South Africa, October 1-3, 2014.

<sup>8</sup> Söderbaum, F., & Granit, J. (2014). The Political Economy of Regionalism: The Relevance for International Waters and the Global Environment Facility: A STAP Issues Paper. Global Environment Facility, Washington, D.C.

<http://www.stagef.org/stap/wp-content/uploads/2014/04/Political-Economy-Low-Res-Compressed.pdf>

<sup>9</sup> Held in Washington, DC, June 11-12, 2013.

<sup>10</sup> Held in Bridgetown, Barbados, October 30, 2013.

transboundary cooperation in support of stated environmental goals. This is possible when regional and national political and economic contexts are adequately assessed, incentive structures are clear and integrated with national agendas, and institutions are in place to facilitate multi-purpose transboundary collaboration.

**d. Marine spatial planning in practice.**

STAP, UNEP, and the World Conservation Monitoring Centre are jointly undertaking a cross-cutting initiative to review the available global experience of implementing Marine Spatial Planning (MSP). The partnership undertaking this task have invited all relevant GEF focal points, along with a wide range of national and regional agencies and in collaboration with the CBD Secretariat, to contribute their experience through an on-line survey, the results of which is currently under analysis. The expected outputs will include lessons on the challenges of successfully making the transition from planning to implementation, as well as lessons on the analysis of the governance context and identification of capacity building needs by context and MSP type.

**e. GEF CEO Innovation Forum on Information Communication Technology (ICT)**

The GEF CEO Forum in December 2013<sup>11</sup> drew experts from academia, civil society and the private and public sectors to discuss the use of Information Communication Technology (ICT) to address global environmental challenges. The STAP Chairperson began discussions by highlighting the importance of ICT for both gathering and analyzing the substantial quantity of data that the GEF continues to generate through its projects and programs. Robust and accessible data are essential for scaling up and improving the resilience of investments, and providing and sharing knowledge on the effectiveness of interventions – critical steps towards delivering transformational impacts. The Forum, which was intended to serve as the first of a series of related discussions in the course of GEF-6, provided preliminary ideas for how the GEF can integrate appropriate ICT solutions into its strategic goals and policies. As the GEF enters its Sixth Replenishment Cycle, it has the opportunity to experiment with ICT innovations, especially within its newly formed integrated approaches, as well as moving further to comprehensive application of Results Based Management and implementing a Knowledge Management Strategy.

**f. Improving understanding of mercury in the environment**

The UNEP 2013 Global Mercury Assessment<sup>12</sup> identified large uncertainties in global estimates of mercury emissions in the air due to a lack of information on the mercury content of some raw materials, the levels of activity that release the pollutant, and the validity of assumptions regarding processes and technologies employed to reduce its emissions. The document also pointed out that the accuracy and precision of measurement-based estimates can depend on the validity of extrapolating measurements made at infrequent intervals to longer periods, or measurements made at one plant to other facilities with similar operations. In light of these findings, discussions at the January 2014 retreat between the GEF

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<sup>11</sup> Held in Washington, DC, December 18, 2013.

<sup>12</sup> UNEP, 2013. Global Mercury Assessment 2013: Sources, Emissions, Releases and Environmental Transport. UNEP Chemicals Branch, Geneva, Switzerland. Retrieved from: <<http://www.unep.org/PDF/PressReleases/GlobalMercuryAssessment2013.pdf>>

Secretariat, STAP, Chemicals Conventions Secretariats and UNEP Chemicals<sup>13</sup> explored the potential role of targeted research in furthering knowledge on mercury. It was noted that as a respected global scientific network, the STAP has the opportunity to build upon pre-existing research and knowledge platforms of UNEP Chemicals and the Mercury Partnership to improve the scientific and technical underpinnings of GEF interventions, especially by working towards developing a centralized data platform to standardize data quality and treatment internationally. The STAP is currently engaged with the Society for Eco-toxicology and Chemistry (SETAC)<sup>14</sup> to expand the thinking behind encouraging data standardization and sharing between key partner organizations, and using targeted research to test protocols for new datasets and enable more accurate modeling.

## 7) Upcoming activities

### a. **Black carbon**

It is being increasingly recognized within scientific communities that significant reductions in emissions of short-lived climate forcers (SLCFs) such as black carbon, methane, HFCs, and tropospheric ozone are essential to prevent dangerous warming above 2°C<sup>15</sup>. The GEF has responded to this recognition with its recent inclusion of SLCFs as a target for mitigation using advanced technologies. Given that SLCF mitigation is a new and rapidly evolving field, there exist numerous opportunities for scientific and technical support to enhance the effectiveness of future interventions<sup>16</sup>. The STAP is currently in the process of drafting operational guidance on developing GEF projects that address black carbon – the SLCF that has the greatest effect on the climate. Besides its importance as a climate forcer (second only to carbon dioxide<sup>17</sup>), black carbon is important because of the notable lack of monitoring and measurement frameworks presently in place at the project level, and because of the synergistic benefits for human health that could arise from emissions reductions. Interestingly, a significant number of GEF projects already focus on reducing black carbon emissions, without taking the climate benefits into account. This operational guidance document will build on recent reports by UNEP/WMO<sup>18</sup>, the World Bank<sup>19</sup>, and GEF donor countries on this subject, and provide project developers with a framework for monitoring and measuring black carbon and its climatic impacts and strategies for reducing its emissions across multiple sectors.

<sup>13</sup> Held in Glion, Switzerland, January 20-24, 2014.

<sup>14</sup> <http://www.setac.org/> : SETAC is a “not-for-profit, global professional organization comprised of some 6,000 individual members and institutions from academia, business and government. Since 1979, the Society has provided a forum where scientists, managers and other professionals exchange information and ideas on the study, analysis and solution of environmental problems, the management and regulation of natural resources, research and development, and environmental education.”. It is implemented worldwide.

<sup>15</sup> Kopp, R.E., and Mauzerall, D.L., Assessing the climatic benefits of black carbon mitigation. *Proceedings of the National Academy of Sciences* 107(26): 11703-11708.

<sup>16</sup> STAP, 2012. *Climate Change: A Scientific Assessment for the GEF*. A STAP Information Document. Ravindranath, N.H., Sims, R.E.H., Ürges-Vorsatz, D., Beerepoot, M., Chaturvedi, R.K., Neretin, L. (eds.). Global Environment Facility, Washington, DC. Retrieved from:

<[http://www.stapgef.org/stap/wp-content/uploads/2013/05/Climate-Change-A-Scientific-Assessment-for-the-GEF\\_2.pdf](http://www.stapgef.org/stap/wp-content/uploads/2013/05/Climate-Change-A-Scientific-Assessment-for-the-GEF_2.pdf)>

<sup>17</sup> Bond, T.C., Doherty, S.J., Fahey, D.W. *et al.*, 2013. Bounding the role of black carbon in the climate system: a scientific assessment. *Journal of Geophysical Research-Atmospheres* 118: 5380-5552.

<sup>18</sup> UNEP/WMO, 2011. *Integrated Assessment of Black Carbon and Tropospheric Ozone: Summary for Decision Makers*. United Nations Environment Programme/World Meteorological Organization. Available at:

[http://www.wmo.int/pages/prog/arep/gaw/documents/BlackCarbon\\_SDM.pdf](http://www.wmo.int/pages/prog/arep/gaw/documents/BlackCarbon_SDM.pdf).

<sup>19</sup> The World Bank, 2013. *Integration of short-lived climate pollutants in World Bank activities*. Akbar, S. *et al.*

## **b. Biofuels for climate change mitigation**

Recent reports by the IPCC<sup>20</sup>, the IEA<sup>21</sup>, and the Global Energy Assessment<sup>22</sup> highlight the significant role that biofuels have as an energy source in future mitigation scenarios to stabilize global average warming near 2°C. However, the production of biofuels continues to be a subject of heated debate within the scientific and policy communities, largely due to the environmental and socio-economic impacts of its land use requirements. To assist the GEF with navigating this debate, the STAP is in the process of finalizing a report that provides a simple guidance method to assess under what circumstances biofuel projects will likely result in significant greenhouse gas mitigation, minimize the risk of negative environmental impacts, and have the potential to provide positive environmental and social benefits including increased resilience to food security. Preliminary recommendations indicate that biofuels projects need to follow existing safeguards, continually evaluate potential projects against sustainable criteria and indicators such as those proposed by the Global Bioenergy Partnership (GBEP), and emphasize multi-sectoral stakeholder engagement to enhance transparency and accountability.

## **c. Sustainable urbanization**

As the world's urban population continues to grow<sup>23</sup>, it becomes increasingly clear that cities will have significant influence in determining whether local, regional, and global environmental and sustainable development goals are met. The STAP is currently writing a document that reports various options for increasing the sustainability of urbanization, and the vital role that the GEF can play in catalyzing this complex process. The document shows how sustainable urbanization relates to many of the goals of GEF focal areas, and identifies elements for the implementation of integrated approaches for cities in GEF-6. These elements include refining the objectives of the GEF-6 Integrated Approach on Sustainable Cities to delimit expected outcomes and results, and thus indicators of success<sup>24,25</sup>. The Panel looks forward to assisting the GEF to improve and scale up its efforts in this domain by increasing the methodological rigor of project and program design, and identifying harmonized indicators that are relevant to outcomes of multiple focal areas. A STAP policy brief on sustainable urbanization will be made available to the GEF Council and Assembly in May 2014.

## **d. Agro-ecosystem resilience**

Resilient agro-ecosystems are able to absorb shocks and stresses while maintaining ecological, social and economic functions in the long-term. In a world where rising climate instability is projected to increase social unrest and economic volatility, approaches such as sustainable land management have emerged to build agro-ecosystem resilience by integrating the management of land, water and biodiversity for the generation of ecosystem services and improved livelihoods. Despite the growing popularity of such

<sup>20</sup> IPCC, 2011: Summary for Policymakers. In: Edenhofer, O., Pichs-Madruga, R., Sokona, Y., Seyboth, K., Matschoss, P., Kadner, S., Zwickel, T., Eickemeier, P., Hansen, G., Schlömer, S., von Stechow, C. (eds.), IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

<sup>21</sup> IEA, 2012. Energy Technology Perspectives. International Energy Agency, Paris, France.

<sup>22</sup> GEA, 2012. Global Energy Assessment – Toward a Sustainable Future, Cambridge University Press, Cambridge UK and New York, NY, USA.

<sup>23</sup> UNFPA, 2014. "Urbanization: a majority in cities". United Nations Population Fund. Retrieved from: <<http://www.unfpa.org/pds/urbanization.htm>>

<sup>24</sup> IPCC 2014: Summary for Policymakers. In: Edenhofer, O., et. al.. (eds.) IPCC Working Group III Contribution to the IPCC 5<sup>th</sup> Assessment Report "Climate Change 2014: Mitigation of Climate Change"

<sup>25</sup> Secretariat of the Convention on Biological Diversity (2012) Cities and Biodiversity Outlook. Montreal, 64 pages. <http://www.cbd.int/en/subnational/partners-and-initiatives/cbo>

approaches, defining measureable indicators of the resilience of agro-ecosystems remains a significant challenge because of their multi-dimensional nature – both spatially and temporally. To address this, the STAP, in collaboration with the GEF, UNCCD, UNFCCC and CBD, will be convening a small expert workshop in September 2014 to bring together a diversity of expert perspectives with the primary goal of identifying indicators of agro-ecosystem resilience that can be measured, monitored and assessed at local, national and global scales. In addition to increasing harmonization of monitoring and reporting of common objectives across the GEF Focal Areas and Conventions, such indicators would underpin evidence generation on the effectiveness of different land management approaches at increasing agro-ecosystem resilience.

#### **e. National Adaptation Plans**

National Adaptation Plans (NAPs) are an emerging and important area in adaptation science and policy. The IPCC's Fifth Assessment Report (AR5) has highlighted the importance of mainstreaming adaptation concerns into existing planning and development processes at national and sub-national levels. In recent years, NAPs have also emerged as an important area for multilateral action under the United Nations Framework Convention on Climate Change (UNFCCC), and the GEF has been urged to support the NAPs for all developing countries. Given the need to develop guidance for GEF projects in this area, and to support project development, STAP is preparing a technical report that will present a number of different institutional models and approaches for mainstreaming adaptation at the national level. This report will examine issues related both to the process of NAPs and NAP outcomes. The STAP report will identify different pathways through which national adaptation / strategy development was (and is) being carried out, including relevant enabling policies, institutional arrangements, stakeholder engagement and the role of science and knowledge (including assessments of impacts, vulnerability and adaptation). The report will also present possible outcomes of a NAP process, in terms of the attributes and characteristics of the national and sub-national institutional arrangements for mainstreaming and long-term adaptation.

#### **f. The scientific basis for measuring, monitoring and evaluating adaptation**

Climate change adaptation is an emerging area where there is a need to develop robust and empirically validated methodologies based in sound science. Measuring, monitoring and evaluating adaptation actions is particularly important for developing countries because it is needed to identify effective, efficient measures and allocate scarce resources to those actions that are most likely to increase resilience to climate risks in a way that also supports short- and long-term development objectives. Evidence-based results are required to guide policy responses, design adaptation interventions and scale up actions. M&E methodologies also need to be cost-effective in the sense that they need to be viable within budgetary constraints and operationally implementable. In collaboration with UNEP's Programme of Research on Vulnerability, Impacts and Adaptation (PROVIA), STAP is undertaking an activity which will involve a set of commissioned papers related to measurement, monitoring and evaluation that will help improve the design and use of M&E systems, particularly as interventions target medium to long-term adaptation. The commissioned papers will be discussed and examined during a stakeholder validation / dissemination workshop later in the year.

### **g. Improvement of the Methodology of GHG emission Reduction Calculations in GEF Projects**

In the report of the 45<sup>th</sup> Meeting of the Council<sup>26</sup>, the Council requests “*the GEF Secretariat, in collaboration with STAP and other relevant entities to continue its work on the improvement of the methodology of GHG emissions reduction calculations, and to engage in dialogue to (i) the assessment of direct GHG emission reduction during project implementation and at completion, and (ii) improved estimation of indirect GHG emission reduction.*” Subsequently, the STAP has participated in two GEF Secretariat coordinated dialogues with Agencies, and at present two working groups are to be set up in June 2014 (working through until March 2015) to draft detailed propositions for the Council. STAP is currently engaged in Working Group 1, which seeks to propose improvements to existing GEF GHG accounting methodologies for direct ex-ante GHG reduction for transport, renewable energy and energy efficiency projects, as well as a new GEF GHG accounting methodology for estimation of urban projects’ emission reduction impacts. In addition, STAP is assisting in Working Group 2 which is reviewing a new GEF GHG methodology for the estimation of LULUCF projects climate mitigation impact. STAP will seek to help the GEF partnership avoid duplication wherever possible, noting its past work in transportation methodologies, carbon accounting (through the recent carbon benefits project work) as well as other efforts in the field that might be brought to bear for the GEF.

## **8. STAP engagement with conventions**

### **a. UNCCD, UNFCCC, CBD – Agro-ecosystem resilience workshop**

At the Rio+20 conference in June 2013, the UNCCD, UNFCCC, and CBD reinforced their mutual interests in enhancing linkages between mainstreaming biodiversity conservation, sustainable land management, and climate change mitigation and adaptation<sup>27</sup>. Building resilience in agro-ecosystems offers an avenue to connect and address these mutual goals, and is already highly relevant to all three Conventions – e.g. through a focus on ecosystem resilience within the CBD’s Aichi Target 15; sustainable land management within UNCCD’s Strategic Objective 3 of the 10-year strategic plan; and land-based adaptation within UNFCCC’s Cancun Adaptation Framework. Meanwhile, the GEF is increasingly seeking to enhance the resilience of terrestrial and marine environments through cross-cutting projects, including through complementarities with the LDCF and SCCF. As outlined above, STAP will be coordinating a GEF-wide effort to identify indicators of agro-ecosystem resilience at multiple scales. This effort is a prequel to future work on identifying common indicators for multiple-focal area projects.

<sup>26</sup> Joint Summary of the Chairs, 45<sup>th</sup> GEF Council Meeting, November 5-7, 2013.

[http://www.thegef.org/gef/sites/thegef.org/files/documents/November%207\\_Joint\\_Summary\\_of%20the%20Chairs\\_v3\\_FINAL.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/November%207_Joint_Summary_of%20the%20Chairs_v3_FINAL.pdf)

<sup>27</sup> Convention on Biological Diversity, United Nations Convention to Combat Desertification, United Nations Framework Convention on Climate Change, 2012. *The Rio Conventions Action on Adaptation*.

## ANNEX 1. STAP Work Program FY14 record of achievement

| Act. Nr.               | Output / Product  | Milestones  | Status / Next Steps  |
|------------------------|---|---|--|
| Cross-cutting<br>XC#4  | <p><b>Scientific guidance to GEF Project 3449 Carbon Benefits Project (CBP): Modeling, Measurement and Monitoring (UNEP/World Bank MSP)</b></p> <p><b>Justification:</b> Responding to a request from the GEF Secretariat, STAP will lead an independent review of the utility of the set of tools developed by the Carbon Benefits Project. The review will be conducted by the GEF Agencies (project developers), and experts on carbon tools. The review outcomes will serve to strengthen the applicability and longevity of the tools for the GEF.</p>   | <ul style="list-style-type: none"> <li>• CBP review meeting in September 2012</li> <li>• Recommendations and conclusions resulting from the review: December 2012</li> </ul>                  | Completed. The report was submitted to the GEF Secretariat and UNEP.   |
| Cross-cutting<br>XC#12 | <p><b>Scientific advice to GEF on impacts of urbanization on the delivery of GEBs</b></p> <p><b>Justification:</b> Half of humanity now lives in cities and within the next two decades 60% of the world's population will reside in urban areas. Urban growth is the highest in the developing world, Cities offer major opportunities to reduce environmental pressures, but if not properly managed can represent ever increasing threat to the global environment (GEBs). STAP's assessment of environmental impacts and opportunities of urbanization will help to inform GEF project implementation and contribute to the development of GEF-6 strategies to properly capture opportunities and avoid negative impacts on GEBs associated with expanding urban environments.</p> <p><b>Requested by:</b> STAP Panel</p> | <ul style="list-style-type: none"> <li>• Coordination with GEF Sec to have a Green Cities forum (tbd with GEF Sec)</li> <li>• Written products to be developed as deemed necessary</li> </ul> | The STAP has put together a Policy Brief for release at the GEF Assembly in May 2014, entitled "Proliferation of Urban Centres, their impact on the world's environment and the potential role of the GEF". This brief is based on a longer paper still being refined, which the STAP intends to release in line with the 46th Council Meeting, to take advantage of inputs from the planned Sustainable Cities Round Table to be held at the GEF Assembly, as well as add further scientific context provided from the 2014 IPCC Working Group III report, and other emerging research in 2014. |
| Cross-cutting<br>XC#13 | <p><b>Advisory document on marine spatial planning in implementation of CBD COP-11 decision and IW focal area priorities for GEF-6</b></p> <p><b>Justification:</b> Responding to a request from the Executive Secretary of the CBD in implementation of CBD COP-11 Decision XI/18 on marine</p>  | <ul style="list-style-type: none"> <li>• Practical guidance/Advisory document</li> <li>• Expert Workshop</li> <li>• Publication</li> </ul>  | STAP is working with UNEP-WCMC to gather information from experts in Marine Spatial Planning via a questionnaire that will be the subject of an experts meeting in Cambridge in late April, 2014. The outputs of this meeting combined with information collected from the   |

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|                                    | <p>spatial planning and reflecting upon strategic priorities of the GEF IW focal area towards GEF-6, STAP will produce a consolidated practical guidance/advisory document for marine spatial planning. The document, inter alia, will explore multiple layers of spatial planning and include considerations and experiences related to spatial planning in the water resources management continuum from land to the sea.</p> <p><b>Requested by:</b> CBD Secretariat and STAP</p>   |  | <p>questionnaire will be consolidated to form the basis of a consolidated advisory document summarizing experiences and lessons from the collected international MSP case studies, as well as recommendations for online dissemination and knowledge sharing including recommendations for GEF investments.</p>   |
| <p><b>Cross-cutting XC# 14</b></p> | <p><b>Advisory document on green chemistry applications for global environmental benefits</b></p> <p><b>Justification:</b> In March 2013, the GEF and the STAP co-organized a workshop that explored the technologies, business models, and the potential for future GEF projects and programs in the area of green chemistry and bio-based chemicals. “Green chemistry, also known as sustainable chemistry, is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. Workshop participants agreed on a number of specific recommendations for the GEF with a particularly strong consensus emerging on the need to promote awareness of green chemistry among recipient countries and GEF agencies as a foundation for new projects.</p> <p>STAP was asked to develop an advisory document for the GEF Council on “what, where and how” green chemistry applications could support GEF recipient countries in protection of global commons.</p> <p><b>Requested by:</b> GEF Secretariat and STAP</p> | <ul style="list-style-type: none"> <li>• STAP Advisory Document</li> <li>• Expert Workshop (tentatively)</li> </ul>  | <p>The GEF Secretariat Chemicals Task Force, delayed this work from GEF-5 until GEF-6, and have indicated a desire for a workshop on this topic with the Task Force in the second half of 2014 to elaborate and fine tune desired outputs from the STAP, potential pilots and other elements required to introduce Green Chemistry to the Chemicals portfolio in GEF-6.</p> |
| <p><b>Biodiversity BD#7</b></p>    | <p><b>A review of the literature</b> that synthesizes global experience with the following question: “What has been the impact of protected areas in GEF-recipient countries on human welfare in neighboring communities, and under what circumstances has the impact been positive?”</p> <p><b>Justification:</b> Requested by the GEF Secretariat<br/>Supports LO2 of BD Focal Area Strategy</p>   | <ul style="list-style-type: none"> <li>• Panel member to design TORs – Jan 2012;</li> <li>• STAP Secretariat set up and manage contracts – Feb 2012 – Oct 2013;</li> <li>• Draft report June 2013</li> <li>• Final report Sept 2013</li> </ul> | <p>Ongoing</p>  |

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| <b>Biodiversity<br/>BD#9</b>                       | <p><b>IPBES</b> – Participation in planning group and plenary meetings; Participation in refining the terms of reference of individual assessments, contribution to specific assessments.</p> <p><b>Justification:</b> GEF providing financial resources for IPBES; ensure assessments are of relevance to GEF focal area programs.</p>  | <ul style="list-style-type: none"> <li>• 1<sup>st</sup> Meeting of Multilateral Expert Panel</li> </ul>   | <p>STAP attended 1<sup>st</sup> Plenary meeting in January 2013. STAP will continue to contribute to IPBES through the work of the Multilateral Expert Panel (MEP) – Sept 2013</p>         |
| <b>Biodiversity<br/>BD#10</b>                      | <p><b>Mainstreaming Biodiversity</b></p> <p>Mainstreaming intervention types include the incorporation of the value of biodiversity and ecosystem services into national and local financial and development planning; in policy instruments; in achieving improved management practices in agriculture and other production sectors; in developing innovative financing mechanisms such as the payment for environmental services, the certification of products and other supply chain interventions.</p> <p><b>Justification:</b> Requested by GEF Secretariat</p>  | <ul style="list-style-type: none"> <li>• Discussion Paper – May 2013</li> <li>• Expert Workshop – Sept/Oct 2013</li> <li>• Final publication – Guidelines for mainstreaming biodiversity Nov. 2013</li> </ul> | <p>Finalization of discussion paper; preparation and delivery of expert workshop</p>   |
| <b>Biodiversity<br/>BD#11</b>                      | <p><b>Biodiversity and Climate Change</b></p> <p>Interactions between biodiversity and climate change have become ever more frequent and complex – with important implications for the GEF BD Strategy. Carbon sequestration from ecosystem restoration at scale has implications for the GEF CC Strategy. <i>Global Warming &amp; Biological Diversity</i> (Peters &amp; Lovejoy, 1992) noted little measurable impact in nature. <i>Climate &amp; Biodiversity</i> (Lovejoy &amp; Hannah, 2005) documented changes to biodiversity and ecosystems. Over the last 10 years there has been a surge in research in this area.</p> <p>The objective of this work is to review current science on impacts, with a view to proposing guidance for GEF programming.</p> | <ul style="list-style-type: none"> <li>• Draft discussion paper – Nov/Dec 2013</li> <li>• Expert Workshop – Jan 2014</li> </ul>   | <p>Begin scoping of work plan;<br/>Develop terms of reference</p>  |
| <b>Climate<br/>change<br/>mitigation<br/>CC#10</b> | <p><b>STAP Operational Guidance on Developing Projects Addressing Black Carbon and other STCF Mitigation</b></p> <p><b>Justification:</b> Black carbon and non-absorbing aerosols have short</p>   | <p>TOR – Aug 2013<br/>Workshop – end of 2013<br/>Advisory Document – first quarter of 2014</p>  | <p>Work is underway to develop Operational Guidance on Developing Projects Addressing Black Carbon at the GEF. A TOR will be issued to assist in writing the technical aspects of this</p> |

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|   | <p>lifetimes in the atmosphere of only days to weeks, but can have significant direct and indirect radiative forcing effects. There is strong evidence that reducing black carbon emissions from trucks, off-road vehicles, stationary diesel engines, and shipping would present an important short term strategy to mitigate atmospheric concentrations of pollutants with positive radiative forcing. Therefore, short-term mitigation strategies that focus on black carbon, (as well as ship emissions and contrails from aircraft) can play an important role in climate change mitigation. The challenge is how best to operationalize such strategies within GEF project funding. The ultimate goal is that GEF projects aimed at reducing BC are going to do an effective GHG mitigation action and not tend to reverse the cooling effects of aerosols. Requested by the STAP and GEF Secretariat</p> |  | <p>guidance document related to monitoring and measuring black carbon. A draft paper will be finalized with input from experts by the end of 2014.</p> |
| <p><b>International waters IW#9</b></p> | <p><b>The Political Economy of collective action in an IW Context (issues paper)</b></p> <p><b>Justification:</b></p> <ul style="list-style-type: none"> <li>• Incentives, drivers, outlooks in a regional context and value of water systems</li> <li>• Lack of agreed environment/sustainability objectives at the regional level</li> <li>• Regional public “bads”; free riding, weakest link, summation problems and successes, failures, GEF contributions to regional &amp; global public goods (areas beyond national jurisdictions); are new indices useful? what does the IW evaluation(s) reveal?</li> <li>• Benefit generation and benefit sharing opportunities, mainstreaming</li> </ul>   | <ul style="list-style-type: none"> <li>• Develop TOR,</li> <li>• Procure consultants,</li> <li>• Replace IW 8, XC 8, XC12 (Lev, JG)</li> </ul>                                     | <p>The information paper is being finalized and will be published for the GEF Assembly in May.</p>   |
| <p><b>Land degradation LD#3</b></p>     | <p><b>STAP advisory document on sustainable land management and global environmental benefits</b></p> <p><b>Justification:</b> Building on STAP’s work (2005) that demonstrates the links between sustainable land management and global environmental benefits, a STAP advisory document synthesizing the state of the art</p>   | <ul style="list-style-type: none"> <li>• Define terms of referen and identifies expert assist with writing t document by Septemb 2013.</li> <li>• Draft paper completed</li> </ul> | <p>On-going. The report will be completed, published and submitted to the Council at their meeting in October 2014.</p>                                |

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|                                     | <p>knowledge between sustainable land management and global environmental benefits will further emphasize this important relationship. The document will be used by the GEF (GEF Agencies, country partners, GEF Secretariat) to solidify further their scientific and technical understanding of sustainable land management and its contributions to global environmental benefits.</p>  | <p>by January 2014.</p> <ul style="list-style-type: none"> <li>• Two anonymous peer reviewers identified to review the paper.</li> <li>• Draft paper revised based on comments from STAP, the GEF land degradation task force, and peer reviewers.</li> </ul>  |   |
| <p><b>Land degradation LD#4</b></p> | <p><b>STAP technical report on quantifying land degradation status and trends (tools/methodologies)</b></p> <p><b>Justification:</b> The UNCCD requested STAP’s assistance in identifying methodologies that could assist countries (UNCCD Parties) measure and monitor land cover and land productivity; thereby, assist countries measure, monitor, and report on land cover status – a UNCCD mandatory impact indicator. Addressing this request will continue strengthening the coherence between UNCCD’s impact indicators and the GEF’s land degradation focal area results based management.</p> <p>Additionally, the GEF is considering revising its resource allocation system.<sup>28</sup> For the land degradation focal area, this will include strengthening the scientific basis for the selection of indicators used to assess land degradation status, such as in the global benefits index (GBI). The GEF Secretariat requested STAP’s support in this regard.</p> <p>Thus, the output will assist countries with tools/methodologies to monitor land cover and land productivity. It also will include recommendations on how to strengthen the GEF’s resource allocation</p> | <ul style="list-style-type: none"> <li>• STAP defines terms of reference for a background discussion paper by October 2013.</li> <li>• STAP identifies an expert(s) to write a background discussion paper on measuring and monitoring land cover and land productivity.</li> <li>• STAP will organize a workshop possibly in November 2013 to discuss the background paper. The background paper and the workshop outcomes will contribute towards a technical paper.</li> <li>• The technical paper will be reviewed by the GEF and anonymous peer reviewers. The paper</li> </ul> | <p>This task has been modified as follows: The activity will focus on developing an indicator on ecosystem resilience to climate change that complements the UNCCD’s progress indicators on land cover and productivity. This indicator will enhance the UNCCD’s and the GEF’s efforts to assess progress in fostering ecosystem resilience and reinforce the coherence between the Convention’s monitoring of its 10-Year Strategy and the GEF’s monitoring of the land degradation focal area strategy. It is also expected that this indicator will contribute to the work of the UNFCCC and CBD as a measure of both land-based adaptation and ecosystem resilience, respectively.</p> <p>Additionally, the activity will consider how the method for allocating resources in the GEF land degradation focal area could be strengthened.</p> <p>A STAP/GEF/UNCCD workshop will be</p> |

<sup>28</sup> “Draft Strategic Positioning for the GEF”, GEF Secretariat. March 2013. GEF/R.6/06/Rev.01.

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|                                    | system for the land degradation focal area.   | will focus on methods/tools for quantifying land degradation status and trends. It also will include a section on strengthening indicators in the land degradation global benefits index.<br>• The background and technical papers are finalized by June 2014.   | organized by December 2014 to discuss the issues above with experts.  |
| <b>Chemicals management POPS#5</b> | <p><b>Guidance on Mercury impacts and the most critical interventions needed to combat the environmental impacts of mercury releases.</b></p> <p><b>Justification:</b> As the Mercury INC process nears completion; there should be an overall assessment of the known science, and what form potential interventions might take to mitigate the occurrence of releases and impacts of mercury. In addition, other emerging issues such as E-waste, should be scoped for potential GEF interventions. Primary outputs:</p> <ul style="list-style-type: none"> <li>• A desktop study and whitepaper on mercury, proposing the most critical and cost-effective areas for action</li> <li>• A desktop study and advisory document on E-Waste, highlighting the scale of the problem, latest data trends, and key areas for investment to mitigate the generation and trafficking of e-waste.</li> </ul> | <p>June 2012: having laid out the apparent areas for action, in view of the replenishment process, and the impending Mercury Convention, the GEF Sec asked the STAP to focus on Mercury issues and generate a TOR to help collate Mercury data sets, map management issues, and ultimately aid the GEF track the movement and fate of Mercury and the impact of project interventions</p> <p>September 2012:</p> | <p>Building on the uncertainties in global emissions data outlined in the UNEP 2013 Global Mercury Assessment<sup>29</sup>; and in light of discussions at the January 2014 retreat between the GEF Secretariat, STAP, Chemicals Conventions Secretariats and UNEP Chemicals<sup>30</sup> there has been exploration of the potential role of targeted research in furthering knowledge on mercury. It was noted that as a respected global scientific network, the STAP has the opportunity to build upon pre-existing research and knowledge platforms of UNEP Chemicals and the Mercury Partnership to improve the scientific and technical underpinnings of GEF interventions, especially by working towards developing a centralized data platform to standardize data quality and</p> |

<sup>29</sup> UNEP, 2013. Global Mercury Assessment 2013: Sources, Emissions, Releases and Environmental Transport. UNEP Chemicals Branch, Geneva, Switzerland. Retrieved from: <<http://www.unep.org/PDF/PressReleases/GlobalMercuryAssessment2013.pdf>>

<sup>30</sup> Held in Glion, Switzerland, January 20-24, 2014.

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|  |   | appropriate partners identified for work.<br>May 2013: launch of activity with outreach to Mercury Partners for input into the eventual product. | treatment internationally. The STAP is currently engaged with the Society for Eco-toxicology and Chemistry (SETAC) <sup>31</sup> to expand the thinking behind encouraging data standardization and sharing between key partner organizations, and using targeted research to test protocols for new datasets and enable more accurate modeling. |
| <b>Corporate activity C#1</b>          | <b>Screen LDCF/SCCF proposals</b><br><br><b>Justification:</b> Requested by the LDCF/SCCF Council and part of the STAP terms of reference for adaptation.<br><br>Through this activity, STAP will screen the full-size projects under the LDCF / SCCF. This includes proposals funded jointly with the GEF trust fund. STAP's screen report will be made available to the Agencies and GEF Secretariat. | On-going   | On-going   |
| <b>Corporate activity C#2</b>          | <b>Corporate business</b><br><br>These tasks will involve attendance at, and preparation for, STAP, LDCF/SCCF meetings, and other UNFCCC meetings as appropriate. This also includes responding to requests for ad hoc advice.  | On-going   | On-going   |
| <b>Climate change adaptation CCA#1</b> | <b>Support the National Adaptation Plan process</b><br><br><b>Justification:</b> Responding to the COP guidance, the GEF Secretariat seeks STAP's advice in strengthening scientifically the NAP process for least developed countries.   | A paper on the NAPs will be completed by October 2013.   | Literature review completed. Draft paper on NAPs will be completed by 30 April 2014.   |

<sup>31</sup> <http://www.setac.org/> : SETAC is a "not-for-profit, global professional organization comprised of some 6,000 individual members and institutions from academia, business and government. Since 1979, the Society has provided a forum where scientists, managers and other professionals exchange information and ideas on the study, analysis and solution of environmental problems, the management and regulation of natural resources, research and development, and environmental education." It is implemented worldwide.

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|   | <p>This activity will specifically involve STAP working with the GEF (Agencies and Secretariat) and its scientific network to develop guidance and provide scientific and technical inputs for the NAP process. The precise output(s) will be determined as the work proceeds.</p> <p><b>Linked to:</b> The Conference of the Parties to the UNFCCC (COP 17) decision on NAPs. Their NAPs decision is as follows –<br/> <i>“Requests the Global Environment Facility, as an operating entity of the financial mechanism, through the Least Developed Countries Fund, to consider how to enable activities for the preparation of the national adaptation plan process for the least developed countries Parties, while maintaining progress for the least developed countries work programme, which includes the national adaptation programmes of action.”</i></p>   |   |  |
| <p><b>Climate change adaptation CCA#2</b></p> | <p><b>Strengthening adaptation benefits in multi-trust fund projects</b></p> <p><b>Justification:</b> With the growing number of multi-trust fund projects drawing resources from the GEF trust fund as well as from the LDCF/SCCF, it is important to develop guidance on adaptation co-benefits so they are accurately reflected in the project design.</p> <p>This activity aims to develop guidance on defining explicitly adaptation co-benefits and ways to measure and track these benefits so their scientific reasoning is justified in multi-trust funded projects. The targeted audience includes project developers (Agencies and their partners), as well as the project reviewers (the GEF Secretariat and STAP). The output will be guidance on adaptation co-benefits in multi-trust projects in the form of an internal GEF report.</p> <p><b>Linked to:</b> GEF and LDCF/SCCF work programs</p> | <p>Draft a paper, or develop a template, outlining how adaptation benefits could be imbedded in multi-trust projects.</p> | <p>This activity will be dropped from the work-program, given its low priority and potential change in STAP’s role in the project cycle.</p> |

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| <p><b>Climate change adaptation CCA#3</b></p> | <p><b>Indicators for long-term adaptation</b></p> <p><b>Justification:</b> The draft GEF programming strategy for adaptation to climate change under the LDCF/SCCF includes a new strategic objective on long-term adaptation. To measure and monitor these interventions, there is a need to develop indicators to measure and monitor outcomes at different scales. Indicators will also be required for “process” related outcomes, and it will be important to establish their relevance and validity for the overall objective of vulnerability reduction.</p> | <p>Draft a paper, outlining STAP’s advice on long-term adaptation indicators.</p> | <p>Develop appropriate indicators for long-term adaptation, and link them to monitoring and evaluation frameworks. A STAP workshop will be organized jointly with UNEP’s PROVIA by December 2014.</p> |
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