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PROGRESS ON THE DEVELOPMENT OF RAF INDICATORS FOR THE FOCAL AREAS NOT YET UNDER THE RAF

EXECUTIVE SUMMARY

1. Following GEF-3 and GEF-4 policy recommendations, the GEF is implementing a Resource Allocation Framework (RAF) for the Biodiversity and Climate Change focal areas. The GEF-4 policy recommendations endorsed by Council also requested the Secretariat to work towards developing a GEF-wide RAF by GEF-5, if feasible, and to report on the progress towards developing RAF indicators for the remaining four focal areas by November 2008.
2. The Secretariat presented a Result Based Management (RBM) framework to Council in June 2007, providing a hierarchy of results indicators for each GEF focal area. The revised focal area strategies for GEF-4 were consequently aligned with this RBM framework. Subsequently, the inter-agency focal area task forces have refined or developed tracking tools for monitoring results from GEF projects. These tools have provided a basis for the ongoing identification and development of potential resource allocation indicators.
3. The transboundary nature of the International Waters focal area complicates the identification of relevant resource allocation indicators for individual countries. The GEF Secretariat has, in collaboration with STAP, established three working groups with external experts covering the three major types of international waters, i.e. groundwater, surface freshwater, and large marine ecosystems, to tackle methodological problems and provide practical solutions.
4. In the Land Degradation focal area, a comprehensive indicator system based on global maps has been developed by a medium-size GEF project. Global maps describing land cover, land productivity, water availability and rural income level are available.
5. For the POPs focal area, the most significant challenge seems to be the availability of data sets. The Secretariat is working with STAP and external experts to explore the information provided in the National Implementation Plans (NIPs) as a potential source of indicators at the national level, as well as to identify broad socio-economic proxies that would be well correlated with the use, production, or releases of POPs. Indicators exist for the ozone layer depletion (ODS) focal area; challenges seem to stem mostly from the relatively small size of the focal area.
6. The external expert groups are expected to conclude their work by the end of 2008. The further development of RAF indicators for the GEF focal areas will take into consideration the findings and recommendations from the Mid-Term Review of the RAF as well as guidance from Council regarding the application of a GEF-wide RAF in GEF-5, if feasible. The GEF Secretariat will provide an updated progress report to Council at its June 2009 meeting.

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BACKGROUND

1. At a special meeting in August – September 2005 the GEF Council agreed to implement a Resource Allocation Framework (RAF) for allocating GEF-4 resources among the recipient countries for each of the two largest focal areas (Biodiversity and Climate Change). Under the RAF, country specific allocations for each of these two focal areas would be based on an index of the country's potential to generate global environmental benefits (Global Benefits Index, GBI) in each of the two focal areas and an index of environmental performance (Global Performance Index, GPI, common for the two focal areas).
2. At the same special meeting, the Council confirmed the decision taken at its meeting in November 2003 that the GEF Secretariat should work towards developing a GEF-wide RAF and that the Council would review progress in developing RAF indicators for the remaining focal areas (Land Degradation, International Waters, POPs and Ozone) in November 2008 (see also the *Summary of Negotiations on the Fourth Replenishment of the GEF Trust Fund*, October 2006, paragraph 14).
3. As part of the policy recommendations for GEF-4, Council also agreed that the GEF should continue efforts initiated in GEF-3 to focus on results. The Secretariat, GEF agencies, and the GEF Evaluation Office should develop, in consultation with recipient countries, a set of common quantitative and qualitative indicators and tracking tools for each focal area to be used consistently in all projects with a view to facilitating aggregation of results at the country and program level and assessment of GEF's transformational impact.
4. Consequently, in June 2007, the Secretariat presented a Results Based Management (RBM) Framework to Council (GEF/C.31/11). The RBM Framework defines a hierarchy of result indicators, consistent with OECD/DAC terminology. The revised focal areas strategies for GEF-4, also presented to Council in June 2007 (GEF/C.31/10), were aligned with the proposed RBM Framework and with impact and outcome indicators for the strategic objectives and strategic programs for each focal area in GEF-4. The Secretariat has worked with the GEF agencies to develop tracking tools for each of the focal areas that would capture the contributions to the result indicators from each GEF project under implementation.
5. The indicators for RBM and the indicators for the RAF are closely connected, but not necessarily the same. RBM indicators should capture the contribution of GEF projects under implementation towards meeting the strategic objectives of the focal areas. The RBM indicators will usually rely on self-reporting from projects through the annual monitoring mechanism, and eventually cross-checked by independent project evaluations at project termination.
6. On the other hand, RAF indicators should provide information on the geographical distribution of global environmental issues and should be based on authoritative data sources with global coverage. Both set of indicators, however, should be relevant to the long term objectives of the GEF and should cover the same thematic scope.
7. A Mid-Term Review (MTR) of the RAF that was implemented for the Biodiversity and Climate Change focal areas in GEF-4 will be presented by the GEF Evaluation Office to this

November 2008 Council meeting (GEF/ME/C.34/2). The GEF Secretariat has prepared a management response that will be presented to Council as document GEF/ME/C.34/3. The steps towards developing RAF indicators for the remaining four focal areas not yet under the RAF, as described in this progress report, have not been able to take the findings of the RAF MTR into consideration. The findings and recommendations from the RAF MTR, and related Council comments and guidance, will be taken into account in the further development of RAF indicators for all the focal areas.

8. The RAF for the Biodiversity and Climate Change focal areas in GEF-4 used a common Global Performance Index (GPI) that covered environmental performance broadly and was not specific to either of the focal areas. It is assumed that the GPI can be equally applied to the remaining focal areas and that the limitations in terms of data availability that led to the use of a common GPI for Biodiversity and Climate Change, still prevail. Emphasis has therefore been put on the identification of indicators of global environmental benefits for the four focal areas not yet under the RAF. The approach and progress within each of these four focal areas is reported in the following sections.

INTERNATIONAL WATERS

9. The GEF International Waters (IW) focal area addresses sustainable development challenges faced by states that share transboundary surface water basins, groundwater basins, and marine waters. The long-term objectives of the focal area are twofold: to foster international, multi-state cooperation on transboundary water concerns and to play a catalytic role in addressing those transboundary water-related concerns by assisting cooperating countries to institute the full range of technical assistance, economic, financial, regulatory, and institutional reforms that are needed. Therefore indicators developed for the IW focal area, so far, largely relate to impacts on these shared water bodies, or processes involving a number of countries in a sub-region.

10. IW is the most challenging focal area for which to develop country level indicators because of both the need to catalyze collective action by multiple countries and the wide array of issues covered. There is a tension between a country-based RAF and the need to bring countries together to collectively improve management of complex transboundary concerns. This is all the more evident when looking at how the successes achieved by GEF so far have been achieved at the supra-national level. Nonetheless, the focal area has initiated exploration of alternative indicators that might be used to develop the GBI portion of such an RAF, and progress is reported herein.

11. The GEF Secretariat has contracted three groups of experts with access to global water-related datasets to assist in exploring alternative indicators that might be appropriate. The groups would address each of the three types of transboundary water systems that GEF is commonly involved in: (i) transboundary surface water basins, (ii) transboundary groundwater basins, and (iii) Large Marine Ecosystems. Additionally, STAP has agreed to co-host with the

GEF Secretariat a workshop in December 2008 to review each of the three sets of alternate indicators and explore means of integrating them into a possible GBI for the focal area.

12. Transboundary surface water basins cover more than 44 % of the globe's land surface. The GEF STAP has agreed to collaborate with the GEF Secretariat and a group of experts to sift through the possible indicator alternatives with an agreed set of ToR. A contract has been executed by the GEF Secretariat to the experts to produce an approach paper with alternatives and a series of global maps with relevant indicators consistent with the ToR by the end of 2008.

13. The Large Marine Ecosystems (LMEs) of the world are areas of coastal and marine systems that have distinct bathymetry, currents, and living marine resources, encompassing multi-country areas of enclosed seas and areas of continental shelf. More than 84% of the world's fisheries are included within these 65 LMEs, and it is these coastal areas where land-based pollution, habitat conversion, ports, and population increases are creating the highest degree of conflicts among various uses of the waters. A consortium of collaborators has begun work under a contract with the GEF Secretariat to produce an approach paper on LME indicators by the end of October, 2008 consistent with the agreed ToR for this work.

14. Transboundary groundwater basins may underlie up to 30% of the planet's land mass, especially in areas such as the arid zones of North Africa where there are few defined surface water basins. The UNESCO International Hydrologic Program has been a valuable collaborator with GEF agencies in assisting countries to deal with these uncertain transboundary groundwater systems. UNESCO with its Internationally Shared Aquifer Resources Management (ISARM) network and its International Groundwater Resources Assessment Center (IGRAC) have worked with the GEF Secretariat to produce a ToR for such indicator work in these complex groundwater systems. They have utilized their own resources along with a GEF contract to examine indicator alternatives with the objective to produce an approach paper and accompanying maps by the end of October, 2008.

15. The STAP and the GEF Secretariat have organized a workshop in Paris hosted by the UNESCO International Hydrologic Program and its ISARM and IGRAC networks to be convened during the first week of December, 2008. The workshop will bring together the three groups of collaborators on behalf of GEF to undertake a review of each of the approach papers and prospective indicators and to examine alternatives for combining the indicators to produce a framework GBI for the focal area. The STAP has also agreed to work with the GEF Secretariat to review the approach papers in early November to produce the materials for the December workshop.

16. The key tasks for developing indicators for this focal area include:

- Reviewing alternative sets of global indicators that would be applicable to the types of transboundary systems of interest (for example pollution load estimates; water use conflict potential; groundwater habitat existence/threat/loss, overexploitation; length of coast/ amount of Exclusive Economic Zone of marine waters, etc);
- collecting and analyzing available data sets, including some originating from remote sensing, and deploying examples on global maps;

- reviewing approaches to ascertain country level shares from transboundary water system level data;
- undertaking discussions on the construction of a benefits index, including possible weighting on the different sub-indicators.

LAND DEGRADATION

17. The purpose of the GEF Land Degradation (LD) focal area is to mitigate the increasing severity and extent of land degradation in order to increase and improve the global environmental benefits. Investing in sustainable land management (SLM) to control and prevent land degradation in the wider landscape is an essential and cost-effective way to deliver global environmental benefits. The investment strategy for this focal area does not include investments in the rehabilitation and restoration of highly degraded lands. For reasons of cost-effectiveness and the drive for larger scale impact, GEF funding will only be used for investments that will maintain and/or enhance the ecosystem integrity and the related production potential of rural areas.

18. The extent and trends in land degradation have been established in the focal area strategy for GEF-4 through maps constructed from remote sensing using geographic information systems (GIS). These include: (i) data on net primary productivity and rain use efficiency, (ii) a proxy for land degradation that also reflects on above and below-ground carbon stocks. The wide ranging availability of these maps ensures comprehensive coverage of all eligible countries.

19. The focal area strategy also includes indicators for improved livelihood at the local level to ensure the sustainability, replicability and harmony of global environmental benefits in the context of national development goals. The focal area has invested in clarifying fundamental issues related to the global environmental benefits, a methodology for measuring these benefits and an indicator system enabling the GEF to monitor and evaluate not only the impact of the projects but also the performance of the portfolio as a whole. These indicators are currently being developed as outputs from the MSP “Ensuring Impacts from SLM - Development of a Global Indicator System”.

20. This MSP aims to establish a scientifically rigorous yet pragmatic indicator system for the GEF focal area Land Degradation (Desertification and Deforestation) to measure results at the project, portfolio and global levels. This indicator system will also support better knowledge management for GEF-financed initiatives focusing on mitigating land degradation, especially desertification and deforestation. Therefore, the MSP has been designed to: (i) develop indicators to demonstrate the results derived from actions in the LD focal area and (ii) lay the foundation for a harmonized interagency monitoring system for adaptive management and the evaluation of impacts.

21. During the preparatory phase of the MSP, the inter-agency group agreed on using a hybrid of two prevalent existing frameworks, incorporating elements from both:

- (a) the DPSIR (Drivers-Pressure-State-Impact-Response) framework – widely recognized as a scientifically sound framework for environmental evaluation and assessment; and
- (b) the Millennium Ecosystem Assessment (MA) framework – a broad-based global assessment exercise that includes human well-being, indirect drivers, direct drivers and ecosystem services.

The integration of the two frameworks ensures a comprehensive environmental evaluation through the DPSIR approach, while also addressing the critical socio-economic factors associated with SLM, such as human well-being and poverty reduction. The incorporation of the existing frameworks is also intended to facilitate communication between scientists who are already working on this issue, using one or the other of the models.

22. The LD indicator system will distinguish three categories of indicators including the following:

- (a) Global-level indicators - derived from consistent global data sets and applied for the purpose of prioritizing future GEF resource allocation.
- (b) Portfolio-level indicators - rolled up from the project to the portfolio level in order to track global environmental and livelihood outcomes and impacts of GEF investments in the LD focal area.
- (c) Project-level indicators - measured at the project-level in order to monitor progress towards outcomes and impacts of GEF-financed initiatives as a basis for adaptive management and future impact evaluation. Information will be rolled up to the portfolio. This category of indicators will be embedded in a fully functional score card or tracking tool system, which will help project managers to adjust the intervention logic of their projects by assessing whether or not the hypotheses about their impact pathways were justified.

23. The following set of global-level indicators has been identified for which data and methodologies are already available:

- (a) Land cover measured as fractions of cropland, forests, rangeland, urban areas etc. This information will provide the context required for the interpretation of the other selected indicators. Currently a number of global data sets are reviewed regarding their suitability of providing globally consistent land cover information at a useful resolution.
- (b) Land Productivity measured as global trends in rainfall adjusted greenness based on the Normalized Difference Vegetation Index (NDVI). In detail, the greenness measure will be calculated using the decadal trend in annually accumulated NDVI, interpreted in conjunction with trends in rainfall and temperature. It will be necessary to use the satellite-derived NDVI measures, because they are

globally consistent and can be updated on an annual basis. Data sets produced by Global Assessment of Land Degradation and Improvement / ISRIC – World Soil Information, are suitable and will be available in a few months.

- (c) Water Availability measured as per capita availability of surface and groundwater. A methodology is currently being developed in consultation with a number of expert organizations. It is anticipated that “water availability” will include information on runoff, groundwater extraction, river flow and groundwater stock. TNO, Utrecht has developed a global groundwater product for UNESCO that might be suitable.
- (d) Rural Income measured as: (i) the fraction of population below \$1/day¹ as a measure that is globally used and accepted (data on rural poverty rates are available at the World Bank); (ii) income per capita distribution (the availability of suitable data sets to spatialize population below the poverty line, e.g. within the World Bank is currently being explored).

24. The work on these global level indicators has been finalized. The Center for International Earth Science Information Network (CIESIN) has provided a paper with the profiles for the selected global-level indicators. These profiles provide information on, *inter alia*, methodologies, availability of data sets, sensitivity analysis, and cost implications to measure these indicators. The final report is available.

25. The key tasks for further developing indicators for use in the RAF for this focal area entail:

- identifying existing indicators or those under development in the focal area that might be useable in the RAF;
- translating the highly detailed GIS-based data into country-based indicators of land degradation extent and trend;
- collecting non-GIS based attributes that may be necessary for ensuring overall balance across different areas, regions, countries;
- identifying sufficient degrees of independent variation among the different indicators so that the system can adapt to changing priorities;
- determining a set of weights that reflects the overall priorities for GEF-5, including the balance between land degradation and vulnerability of populations.

26. The challenge of setting up the RAF for the LD focal area might be that some of the listed indicators/indices are not available yet (in development or to be developed), and that in some cases, there is no access to global data sets. The use of national datasets might pose a problem since the methodology used to collect the data is inconsistent across countries.

¹ The threshold has recently been adjusted to 1.25 \$ by the World Bank

POPS

27. GEF's goal in the Persistent Organic Pollutants (POPs) focal area is to protect human health and the environment by assisting countries to reduce and / or eliminate the production, use and releases of POPs. GEF-3 activities were focused on the development of National Implementation Plans (NIPs). Most eligible countries should have a NIP in place by the end of GEF-4. GEF-4 has therefore seen a shift towards implementation, and future GEF activities will be focused on investments to reduce POPs in eligible countries and to carry out capacity building activities, particularly in the countries most lacking foundational capacities for sound chemicals management.

28. The Stockholm Convention was adopted in May 2001, and entered into force in May 2004. The GEF Assembly adopted the POPs focal area in September 2002. As of September 15, 2008, there were 158 parties to the Stockholm Convention, of which some 120 were eligible² for support for implementation activities from the GEF, operating as the financial mechanism of the Convention. The GEF has supported the development of National Implementation Plans (NIPs) in 137 countries³. Fifty-five of these countries have officially submitted their NIPs to the Stockholm Convention as of September 15, 2008. In addition, four countries that are no longer eligible have submitted their NIPs as well. A few countries received NIP development funding but have yet to ratify the Convention. Fewer countries yet have ratified the Stockholm Convention but have not requested NIP funding. Some GEF eligible countries have neither ratified the Convention, nor requested NIP funding.

29. NIPs provide a starting point for ascertaining the magnitude of production, use, or releases of the 12 original POPs in a country. Their usefulness in providing comparable data for countries is limited by the degree of variation in their quality across countries. Additionally, the Convention is considering the inclusion of 11 new POPs to expand the list to a total of 23 POPs. Very little is known about the production, use or release of the potential new additional POPs. Further, an agreed methodology for balancing potential interventions such as avoided releases of dioxins with the disposal of obsolete pesticides does not currently exist. As a result, the development of indicators based on NIPs has to be evaluated against more comparable but indirect indicators of POPs.

30. The work of the Secretariat and GEF agencies conducted in the framework of the POPs Task Force⁴ has focused on the development of a solid results framework. Following GEF-4 replenishment recommendations, the POPs results framework constitutes a set of "common quantitative and qualitative indicators to be used consistently in all projects with a view to

² COP-1 guidance defines an eligible country as "developing country or country with an economy in transition Party to the Convention" further noting that the financial mechanism "should take full account of the specific needs and the special situation of the least developed countries and small island developing States..."

³ Eligibility for financing the initial NIP is extended to countries, which are signatories to the Convention, or countries that are in the process of becoming Parties.

⁴ Regular participants to the POPs Task Force include technical specialists from FAO, UNDP, UNEP, UNIDO, WB, Stockholm Convention Secretariat, STAP member and STAP secretariat. GEFSEC chairs the Task Force. All 10 GEF agencies are included in the distribution list.

facilitating aggregation of results at the country and program level and assessment of GEF's transformational impact".

31. The departure point for developing a set of focal area-wide indicators is the GEF-4 POPs strategy approved in 2007 by Council, and in return the set of indicators forms the basis to track progress on implementation of the GEF-4 POPs strategy, and focal area results and impacts. The POPs focal area Task Force therefore developed the GEF POPs portfolio tracking tool that includes some 40 indicators to track progress towards achieving results for some 20 types of interventions, typical of GEF-4 priorities in line with the strategy. The tracking tool is being field tested for the first time through this year's Project Implementation Review exercise. It will be further improved based on feedback received from the project implementers.

32. The indicators encompass enabling environment indicators (e.g., regulatory frameworks in place or increased capacity for enforcement) and stress reduction indicators (e.g., number and unit cost of tons of PCB destroyed in an environmentally sound manner, or amount and unit cost of avoided emissions of by-products). Environmental impacts will be assessed in the framework of the overall evaluation of the effectiveness of the Convention.

33. One guiding principle that is seen as crucial in the development of indicators that would lend themselves to a RAF-like system is that the process and choice of indicators must be driven by the pertinent GEF strategy, rather than a (poor) set of indicators forcing unintended or unwanted funding decisions and directions. The GEF-4 strategy includes 5 main indicators of 'expected impact.' Assuming there is no fundamental change in priorities going into the next phase of the GEF, it is logical that these or related indicators should then form the backbone of any resource allocation-type formula.

34. There are a number of uncertainties regarding unintentionally produced POPs ("dioxins and furans"), which it is envisaged would receive more ambitious and systematic attention under GEF-5. The overall contribution of open-burning to the inventories is still under discussion, and so is the contribution of poor domestic waste management practices. Even for better defined industrial processes, the contribution of specific processes in developing countries is still subject to discussions; emission factors that are the basis for baseline assessments are still mostly based on emission factors extrapolated from processes in industrialized countries. It is estimated that some processes that are typical of developing country situations might emit three orders of magnitude more than predicted with available emission factors.

35. Other issues of a scientific nature include the difficulty in comparing interventions dealing with different categories of POPs. Contrasting for example an intervention dealing with removal and disposal of obsolete POPs pesticides with an intervention to avoid releases of dioxins and furans from an industrial source. A further uncertainty arises from the possible addition of new POPs to the list of controlled substances under the convention. There is limited knowledge of the distribution of these chemicals in GEF client countries, but in any event use patterns are likely to be different from the existing POPs.

36. In light of the considerations described in the above paragraphs, some analytical work has to take place to support the further development of indicators that could be used in a RAF-

type system under GEF-5 for the POPs focal area. The GEF Secretariat therefore, working in collaboration with STAP, is in the process of contracting independent consultants and experts to address some of these technical issues.

37. Broadly, the scope of this work includes:

- An analysis of the NIPs as a primary source of information: quality of the POPs inventories in publicly available NIPs from a scientific standpoint; strengths and weaknesses of the inventories; ways to be complemented in the countries that have not yet submitted their NIP.
- An analysis of possible alternative data sets: availability; scope; coverage; suitability to feed into RAF-type indicators as appropriate.
- If availability and coverage is confirmed to be a problem, development of scalable proxy indicators (that might only indirectly be linked to specific POPs).
- In any event, development of indicators, including proxy indicators, that could feed into a RAF-type system and cover capacity building needs for POPs management and sound chemicals management more broadly.
- An assessment of what is known of the distribution of the candidate POPs, and possible proxy indicators if feasible.

The STAP will help ensure quality control and vetting of this work. The Secretariat will report to Council at the spring 2009 Council meeting.

OZONE DEPLETING SUBSTANCES

38. The focus of the GEF in the Ozone Depleting Substances (ODS) focal area is to assist eligible countries in phasing out production and consumption of ODS. Only a limited number of countries with economies in transition (CEITs) are still eligible for GEF assistance. GEF efforts under GEF-5 are expected to focus on HCFCs.

39. In the ODS focal area, the main indicator to measure and aggregate results is the amount of ozone depleting chemicals phased out from consumption or production, adjusted for their ozone depletion potential (ODP). The tradition in the ozone layer depletion focal area, as practiced by the Multilateral Fund and also by the GEF, has been to follow a compliance oriented model, based on countries' obligations under the Protocol in the forthcoming replenishment period, and based on countries' reporting of production, import and export of ozone depleting substances to the Ozone Secretariat.

40. As clear obligations become less important in the GEF's work however, even with the expectation of some HCFC phase out activities in CEITs under GEF-5, the challenge will be to select the appropriate indicators to track the full nature of GEF interventions in that focal area: institutional strengthening in some of the less capacitated countries; addressing issues such as illegal trade.

41. A particular challenge also comes with the small number of indicators for the focal area. Although that is an advantage in many ways, it also increases the sensitivity of any ex ante allocation system to quality of the dataset. There is indeed anecdotal evidence of under reporting of HCFCs in the region. Surveys under way in the framework of the medium-sized project “Preparing for HCFC phase out in CEITs: needs, benefits, and potential synergies with other MEAs” will to some extent mitigate this; so will likely the increased attention to HCFC issues in governments and with other stakeholders.

NEXT STEPS

42. As described above, the GEF Secretariat has established a number of working groups through contracting of external experts with access to relevant global data sets. The STAP Secretariat has assisted in this process and STAP will be involved in reviewing the deliverables from these working groups. All working groups are expected to report by the end of this year, and the Secretariat expects then to have a set of potential indicators described for each of the focal areas not yet under the RAF, including proxies where necessary.

43. The potential global environmental benefit indicators will be scrutinized against the following criteria:

- (a) relevance to the long-term strategic objectives of the GEF,
- (b) global coverage,
- (c) data availability, accessibility and reliability,
- (d) relevance to the national environmental management, and
- (e) conceptual consistency between the GEF focal areas.

44. The further development of RAF indicators for the GEF focal areas will take into consideration the findings and recommendations from the Mid-Term Review of the RAF as well as guidance from Council regarding the application of a GEF-wide RAF in GEF-5.

45. The GEF Secretariat will provide an updated progress report to Council for its meeting in June 2009.