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REVISED SCENARIOS AND OPTIONS FOR A “SYSTEM FOR TRANSPARENT ALLOCATION OF RESOURCES” IN GEF-5

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Executive Summary

1. In November 2008, the GEF Evaluation Office (GEFEO) submitted a Mid-Term Review of the Resource Allocation Framework (RAF) to the GEF Council. The conclusions and recommendations guided the development of an improved resource allocation system for GEF-5. Based on further recommendations from the GEFEO, STAP, and GEF Council, the GEF Secretariat has taken a number of steps to revise the RAF.

2. Improvements to the STAR were first presented in a draft version of this current paper¹. Since March 2009, the GEF Secretariat has continued working on the STAR. Improvements include: implementation of a GEF-wide STAR, a proposal for a new GPI, and continued work on the GBI. Also, the Secretariat decided to change the name of the “Resource Allocation Framework” (RAF) to “System for Transparent Allocation of Resources” (STAR.)

3. Other steps taken to improve the STAR include: providing scenarios for expansion and outlining new rules and procedures for the reallocation of unused RAF resources in GEF-4. In order to explore the option of extending the resource allocation system to cover more focal areas, three options were designed and simulated.

Option A: Two STARs (Status Quo). The first option would cover the biodiversity (BD) and climate change (CC) focal areas, but with improved and simplified indices.

Option B: Three STARs (CC, chemicals (CH) and natural resources (NR).). Under this option, there would be three STARs with three separate country allocations for natural resources, climate change, and chemicals.

Option C: Four STARs (CC, BD, land degradation (LD), and CH). Option C expands the resource allocation system to four focal areas.

4. The STAR is still work in progress, with a number of areas to be either further developed or refined. These include improving indicators for the Global Benefits Index (GBI), exploring third year reallocations under GEF-5, further developing the proposed new GPI, and enhancing programming for countries.

¹ See paper at: http://www.thegef.org/uploadedFiles/Policies/Resource_Allocation_Framework/RAF%20Options%20for%20GEF-5%2002-27-2009-v05-6-44pm.pdf

1. INTRODUCTION

Background

1. In November 2008, the GEF Evaluation Office (GEFEO) submitted a *Mid-Term Review of the Resource Allocation Framework (RAF)* to the GEF Council. The review provided eight concluding remarks, four recommendations, and outlined six issues for future consideration (GEF/ME/C.34/Inf.2). These valuable conclusions and recommendations guided the development of an improved resource allocation system for GEF-5. These conclusions, recommendations, and description of future areas for improvement are briefly listed below.

2. The main conclusions of the evaluation were:

- (a) *“The GEF is operating in circumstances which increase the need to purposefully allocate scarce resources.*
- (b) *Data and indicators for assessing global environmental benefits used in the RAF reflect the best available information today, with some gaps which should be addressed over time.*
- (c) *The RAF does not provide effective incentives to improve performance.*
- (d) *Unclear guidelines for the Group Allocation system in the RAF initially limited access for countries.*
- (e) *The complexity of implementation rules for the RAF does not encourage the flexible and dynamic use of resources, especially for a relatively small GEF-4 funding.*
- (f) *The design and rules of the RAF are too complex for a network partnership like the GEF, and guidelines and support have not succeeded in making the RAF transparent and accessible.*
- (g) *The RAF has increased country ownership in countries with an individual allocation and has had a neutral or detrimental effect on country ownership in countries with a group allocation.*
- (h) *The exclusions did not function well and may have diminished the effectiveness of the GEF in delivery of global and regional environmental benefits.”*

3. The main evaluation recommendations were:

- (a) *“Reallocation of unused funds should be allowed in the last year of GEF-4.*
- (b) *The last phase of GEF-4, including reallocation of funds, should be implemented with full public disclosure, transparency, participation, and clear responsibilities.*
- (c) *Implementation rules should be simplified.*
- (d) *Steps to improve RAF design and indices for GEF-5 should be taken as of now.”*

4. Finally, the GEFEO pointed out future areas for improvement:

- (a) *“Upgrading of the global benefits indices and their weights.*
- (b) *Increasing the weight of the environmental portfolio performance.*
- (c) *Improving predictability and cost-benefits for the group allocation, or eliminating the group allocation.*
- (d) *Revising floors and the 50 percent rule.*
- (e) *Recognizing transboundary global environmental problems.*
- (f) *Expanding the RAF to one integrated allocation for all focal areas.”*

5. In addition to the recommendations from the GEFEO RAF evaluation, the Scientific and Technical Advisory Panel (STAP) and other organizations provided useful comments and guidelines to improve the RAF.

6. Given these recommendations, in November 2008 the GEF Council provided the following guidance to the GEF Secretariat.

- (a) *“Take steps towards improving the RAF for Biodiversity and Climate Change in GEF-5 (to be submitted to the June 2009 Council meeting).*
- (b) *Include scenarios (options) for an expansion of the RAF for all focal areas by GEF-5 (to be submitted to the June 2009 Council meeting).*
- (c) *Identify rules and procedures for reallocation of unused RAF resources in GEF-4 (for a Council decision by mail in March 2009).”*

7. Drawing on the recommendations from the GEFEO, STAP, and GEF Council, the GEF Secretariat has taken a number of steps to revise the RAF. These include providing scenarios for expansion and outlining new rules and procedures for the reallocation of unused RAF resources in GEF-4. These improvements are discussed in more detail in the next sections of this paper.

8. The Secretariat also decided to change the name of the “Resource Allocation Framework” (RAF) to “System for Transparent Allocation of Resources” (STAR).² Throughout this document, STAR is used to represent the proposed new system for GEF-5.

² During the GEF retreat on 14 January 2009, the GEF CEO initiated a competition to find a new name for the GEF’s resource allocation system. GEF staff voted and selected the “System for Transparent Allocation of Resources” or STAR as the new name for the GEF-5 resource allocation system.

Features of the STAR - February 2009

9. Improvements to the STAR were first presented in a draft version of this current RAF/STAR paper³. The GEF Secretariat sent the paper to Council members, STAP, GEFEO, Convention Secretariats and GEF agencies in February 2009 and comments were incorporated as appropriate to improve the proposal for the STAR. The February 2009 version of STAR included the following new features, building on the GEF 4 RAF:

- (a) **Expanded set of replenishment scenarios.** Three replenishment scenarios, a *low* (\$3.1 billion), *medium* (\$5 billion) and *high* (\$10 billion), were simulated to capture the potential impacts on overall allocations.
- (b) **More allocation options.** Three allocation options were developed to allow for more flexible allocations:
 - A. **'Status quo'** in GEF-5: one for Climate Change (CC) and the other for Biodiversity (BD);
 - B. **Three modalities of individual country allocations** for CC, Natural Resources (NR) and Chemicals (CH); and
 - C. **Individual country allocations for five focal areas:** CC, BD, Land Degradation (LD), International Waters, and CH.⁴
- (c) **New GBI indicator for Biodiversity.** The GBI for biodiversity was revised to a single indicator taken directly from the IUCN Red List of threatened species.
- (d) **New eligibility index.** The GEF Secretariat developed a new set of eligibility indicators for the Chemicals focal area, using the GEF-4 eligibility database for Climate Change and Biodiversity in line with Paragraph 9 (a) and (b) of the GEF Instrument (GEF Instrument for the Establishment of the Restructured Global Environment Facility, March 2008.)
- (e) **New rules of allocation.** The group allocation system and the 50 percent rule were eliminated.
- (f) **Improved presentation of scenarios.** A software program⁵ for generating maps was adapted to produce maps showing allocation ranges for different countries and regions.

³ See paper at: http://www.thegef.org/uploadedFiles/Policies/Resource_Allocation_Framework/RAF%20Options%20for%20GEF-5%2002-27-2009-v05-6-44pm.pdf

⁴ The sixth Focal Area - Ozone Depleting Substances has been considered along with POPs as an integral part of the Chemicals label.

⁵ The program was originally developed by Mr Frank van Cappelle, who works for UNESCO. Email: f.cappelle@iiep.unesco.org

10. An early version of the STAR was discussed during the GEF Council *ad hoc* Committee held in Paris on 19 March 2009. The following list summarizes comments provided by the participants:

- (a) The STAR needs to be simple, flexible, and transparent.
- (b) The group allocation and the 50 percent rules should be abolished.
- (c) The GEF Secretariat would focus on Option A, while continuing to work on other options.
- (d) Refine indicators including GBI for CC and BD, and the GPI.
- (e) Consider putting the Small Grants Program (SGP), global and regional exclusions, and national communications / enabling activities outside the STAR envelope.
- (f) Consider moving resources not used after 3 years to the global and regional exclusion window.
- (g) Substantiate the proposal to set aside 20 percent for each focal area.

Improvements in STAR – Since March 2009

11. Since March 2009, the GEF Secretariat has continued improving the STAR. Details of the improvement are described in the following section:

- (a) **A floor for focal area allocations.** A floor of \$ 1 million is set for each of the focal areas. There was no floor in the March 2009 paper, although there was a notional floor in the RAF for Group Allocation countries.
- (b) **New levels of set-aside.** The **total set-aside from the focal areas have been set at** 37.2 percent for the \$10 billion scenario 34.3 percent for the \$5 billion scenario, and 32.5 percent for the \$3.1 billion scenario. The different levels were set to align with the GEF Programming Paper (see GEF/R.5/14)
- (c) **The Small Grants Program** and the International Waters Focal Area have been removed from the STAR allocation drawing on comments from the Paris meetings.
- (d) **Improved presentation of results.** Maps were generated to show more detailed allocation for each of the individual countries.
- (e) **A proposal for a new GPI.** In view of Council comments, a new GPI is being proposed based on a set of transparent and publicly available indicators. The new GPI (NGPI), based on the Millennium Development Goal 7 (MDGs), targets and indicators would be comprised of two indexes: the Environmental Performance Index (EPI) and the Environmental Vulnerability Index (EVI).

12. **The remainder of this paper** presents: (1) the methodology used in the STAR; (2) the modifications to data sets, including changes in indicators and data sources for indicators; (3) the assumptions made in resource allocation simulations; (4) the results; and (5) the conclusions.

2. METHODOLOGY

13. The STAR methodology includes the following features, each discussed below: three options under STAR, adjustments for eligibility, a proposal for a new GPI, refined benefit indicators for CC and BD focal areas and relevant benefit indicators for other focal areas.

14. The adjustment of eligibility updates the status of countries' eligibility to receive GEF funds. The revised GBI indicators aim to capture the potential for achieving global environmental benefits for all focal areas. Based on these indicators, a normalized⁶ GB_{IFA} (GEF Benefits Index for each Focal Area) is calculated for eligible countries relative to the potential global environmental benefits for each focal area. The new GPI indicator aims to reward countries which have made commitments to and progress in environmental management.

Three Options under STAR

15. Under GEF-4, resources were provided under resource allocation frameworks in two focal areas: CC and BD. To explore extending the resource allocation system to cover more focal areas, three options were designed for the simulations. These are Options A, B, and C and are shown in Table 2.

16. **Option A: Two STARs (Status Quo.)** The first option would cover the BD and CC focal areas, but with improved and simplified indices. A specific environmental benefit index for each Focal Area would be matched with a common global performance index to calculate country allocations for each focal area. The other four focal areas would be outside of the STAR system. This Option is similar to the current RAF in GEF-4. Thus, it is called the “**Status Quo**” option.

17. **Option B: Three STARs (CC, CH and NR.)** Under this option, there would be three STARs with three separate allocations for each country for Natural Resources (NR), Climate Change (CC), and Chemicals (CH). The NR STAR would include Biodiversity (BD) and Land Degradation (LD); International Waters (IW) would be excluded and receive a specific global allocation outside the STAR system. The CC STAR relates only to mitigation; no resource allocation system is being applied to adaptation. The CH STAR would include both POPs and the Ozone Depleting Substances focal areas. Specific global environmental benefit indices (GBI) for each Focal Area would be matched with a global performance index (GPI) to calculate country allocations for each focal area, which would then be aggregated to derive a total country allocation for CC, CH, and NR.

⁶ Normalization means that the GBIs for all countries sum to 1 (or 100 percent).

18. **Option C: Four STARs (CC, BD, LD, and CH).** Option C expands the resource allocation system to four focal areas.⁷ A specific environmental benefit index for each Focal Area would be matched with a common global performance index to calculate country allocations for each focal area. Country allocation scores are calculated by aggregating the four focal area allocations (CC, BD, LD, and CH.)

Eligibility

19. Country eligibility is defined in Paragraphs 9 (a) and 9 (b) of the GEF Instrument (GEF Instrument for the Establishment of the Restructured Global Environment Facility, March 2008.) Under Paragraph 9 (a), the Environmental Conventions lay out the eligibility criteria for countries to receive grants from the financial mechanism framework of the UN Conventions (the UNFCCC, UNCCD, Stockholm Convention, and the CBD.) Under GEF-4 and as proposed for GEF-5, the following two basic criteria are proposed for country eligibility: (i) the country meets the eligibility criteria established by the relevant Conference of Parties or the Convention Secretariat confirms their status; or (ii) the country is eligible either to borrow from the World Bank or to receive country assistance from UNDP, and the country is a Party to the Convention pertaining to that focal area.

20. The GEF Secretariat has developed a list of eligible GEF countries that comply with these criteria. However, the latter may not be so easily applied to all countries. For example, Korea DPR is eligible for GEF funds according to Paragraph 9 of the GEF Instrument (2008). However, Korea DPR is currently under UN sanctions.⁸ The GEF Secretariat, at this time, considers all such countries as technically eligible, and requests the Council to give further guidance on the actual eligibility of these countries.

21. Some countries have historically not sought GEF funds, and some eligible countries are among the world's richest when measured by GDP per capita, (Qatar and Brunei,⁹ San Marino or Singapore¹⁰.) The International Fund for Agricultural Development (IFAD) has dealt with the comparable question by making allocations to countries that it terms "active." The GEF Council may wish to consider a comparable action. These countries could perhaps be considered under a category of "not otherwise eligible" countries. In this paper, these countries are included as eligible and each receive notional allocations under one or more Conventions. Guidance from Council is sought on how to address questions related to eligibility.

⁷ International Waters would be excluded from the STAR and a GBI for Ozone would not be calculated separately from a Chemicals GBI

⁸ Resolution 1718 (October 14, 2006) The Security Council, acting under Chapter VII of the UN Charter, unanimously imposed sanctions on North Korea, in reaction of Pyongyang's nuclear test. After arduous negotiations, this softer version establishes an embargo on military and technological materials, as well as luxury goods, but does not include reference to military intervention as the US proposed initially. Furthermore, the resolution demands the freezing of North Korea's financial assets with the exception of funds necessary to meet basic needs.

⁹ Measured by GDP per capita, the five richest economies are Luxembourg, Qatar, Norway, Brunei Darussalam, and Kuwait. Source: The World Bank (2008), 2005 International Comparison Program Preliminary Global Report Compares Size of Economies, Press Release No:2008/156/DEC, <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21589281~pagePK:34370~piPK:34424~theSitePK:4607,00.html>

¹⁰ The list of technically eligible but historically inactive countries are as follows: Israel, Kuwait, Oman, Qatar, San Marino, Saudi Arabia, Singapore and United Arab Emirates.

22. A number of Eastern European countries including Estonia, Hungary, Latvia, Lithuania, and Poland have acceded to the EU and have graduated from the GEF or declared themselves as ineligible for GEF funding. Thus, there is no allocation for these countries. Detailed information on eligibility for each of the countries is available in an MS-Excel sheet named “*Eligibility*” of the database of the STAR model in the GEF Website.

Allocation Score Calculation

23. Once the GEF Benefit Index for each focal area and the GEF Performance Index have been obtained, they are then combined to calculate a Normalized Country Score (CS_{FA}) for each focal area. This is visually shown as: $CS_{FA} = GBI_{FA}^{0.8} \times GPI$, which is the same as in the GEF-4 RAF¹¹.

24. The formula basically multiplies the benefit index or GBI (to the power of 0.8 as explained below) with the performance index or GPI. This ensures that there is a direct relationship between a change of performance in any country and the resulting allocation. For example, if a country increases its performance score by 5 percent (and other countries remain unchanged in performance) the allocation will increase by almost 5 percent (the range would be between 4.5 percent and 5 percent depending on the size of the country.)

25. The rationale for using an exponent for the GBI is that it serves to reduce the gap between small and large countries. For example, if a large country has a GBI that is 100 times larger than a smaller country and they both have the same GPI or performance level, then the larger country will get an allocation about 40 times (instead of 100 times) bigger than the smaller country. The actual value of the exponent could be changed. Simulations ran for the GEF-4 RAF showed that the value of 0.8 both normalized the scores and maximized the consistency between the RAF and the historical (i.e. pre-RAF) allocations for BD and CC.

Options for a Global Performance Index

26. The GEF Performance Index, as used in the GEF-4 RAF, has been applied in the STAR simulations. It consists of three components:

- (a) Government performance in relevant policy areas, measured by the Country Environmental Policy and Institutional Assessment Indicator (CEPIA);
- (b) Quality of management in selected areas of the public sector, measured by the Broad Framework Indicator (BFI); and
- (c) Quality of completed and ongoing environmental projects in the country, as measured by the Portfolio Performance Indicator (PPI).¹²

¹¹ As in GEF-4, a general GPI has been used across focal areas. The GPI data for mid 2008 (mid-term of GEF-4) was used in the simulation. However, in applying the results, the concept of ‘Group Allocation’ is abandoned, and there is no minimum allocation (‘floor’) at the focal area level in this proposed option.

¹² http://www.thegef.org/uploadedFiles/Policies/Resource_Allocation_Framework/GEF-4_Indicative_Allocations/GPI.pdf

27. In the GPI database, 23 eligible countries do not have any GPI data. While running the simulations of allocations, the GEF Secretariat has selected a score of 2.18, which is the minimum among all the countries, and filled in the missing data for GPI in all the 23 countries with the score of 2.18.

28. Council has provided comments that the current GPI needs to be revised in future allocation systems due to some perceived shortcomings. The CPIA evaluates the quality¹³ of institutions and policies, and is the main criterion for allocating country-credits from IDA. Specific criticisms of the CPIA include the lack of clarity and transparency of the different components of the index. Another criticism of the CPIA is the discrepancy between the quality of policies and institutions rated by the CPIA, and actual growth of rates of a select number of countries, while comparisons with UNDP's Human Poverty Index (HPI) reveal discrepancies.¹⁴ In addition, full disclosure of the methodology remains an outstanding issue and the GPI does not include a vulnerability factor.

29. To increase transparency and provide greater openness and accountability, a new GPI is proposed, based on the Millennium Development Goal 7 (MDG 7) targets and data sources, and a metric for vulnerability. A concept for the new GPI is presented in Appendix I.

30. Therefore, there are two options for future use of a Global Performance Index:

(1) Use the current GPI based on the World Bank CPIA indicators.

(2) Use a revised GPI based on the MDG 7 targets and data sources, including a measure of vulnerability.

31. The options of using a new Global Performance Index is being further developed with a set of comparative simulations between the old and new options, which will be presented to the Council.

Global Benefit Indicators and Indices

32. The main challenge to applying the current methodology lies in finding more globally reliable and relevant GBI indicators for CC and BD, finding appropriate indicators for other focal areas, and keeping these indicators updated at an appropriate frequency. The following sections describe the present status of the STAR indicator development in each of the focal areas.

33. There is a significant change in terms of the Global Benefit Index (GBI). In GEF-4, the GBI covered only the Climate Change and Biodiversity focal areas. In GEF-5, the GEF Secretariat has collected GBI data for four of the focal areas (BD, CC, LD and CH). In addition, the GEF secretariat has tried to revise and update the GBI in both the Climate

¹³ Quality refers to how conducive the policy and institutional framework is to fostering poverty reduction, sustainable growth and the effective use of development resources. "The CPIA is derived from judgments of Bank staff on country performance on a set of macroeconomic, structural, social and governance criteria ... which embody a set of well-known neo-liberal economic norms" (Van Waeyenberge 2008).

¹⁴ A number of countries show significant discrepancies in scores for the two indicators (using 2005 as the year of comparison) – Benin, Eritrea, Nigeria, Togo, Sudan, Senegal, Burkina Faso, Tanzania, Mali, Lesotho, Mozambique.

Change and Biodiversity focal areas. More detailed information on how the GBIs in the four focal areas were developed is presented below.

34. To make the process and practice of the STAR transparent, the GEF Secretariat is providing access to a MS-Excel workbook on the GEF website. The workbook contains the newly developed indicator database for each of the focal areas and the model, and details of the formulae.

Climate Change Focal Area GBI indicator

35. The GBI employed for Climate Change in GEF-4 was again used in this simulation. The GBI is based on countries' emissions of greenhouse gases in tons of CO₂ equivalents in the year 2000 multiplied by an adjustment factor, which rewards countries that show a decrease in the amount of emissions of CO₂ relative to GDP or "Carbon Intensity."

36. Mathematically, the adjustment factor is expressed as a country's Carbon Intensity in 1990 divided by the country's Carbon Intensity in 2000. The Carbon Intensity data now needs updating. Currently, STAP is working with the GEF Secretariat to update this data and this should lead to a revised GBI for Climate Change.

37. The GBI for Climate Change in GEF-4 is represented as: "*A country's emissions of greenhouse gases in tons of CO₂ equivalents in the year 2000 multiplied by the country's Carbon Intensity in 1995 divided by the country's Carbon Intensity in 2000.*" The GBI for Climate Change in GEF-5 is represented as: "*A country's emissions of greenhouse gases in tons of CO₂ equivalents in year 2000 multiplied by the country's Carbon Intensity in 2000 divided by the country's Carbon Intensity in 2005 or in the latest year available.*"

38. The CC GBI has been criticized for "rewarding the polluters" and for not taking into consideration the significant potential for CC global benefits related to land use change and deforestation. The GEF Secretariat believes that as long as the baseline of carbon emission is unchanged, regardless of the phase of GEF, the calculation methodology does not reward the carbon emissions in the country. Rather, the methodology acknowledges the carbon emission history and allocates the GEF resources to countries with the greatest chance to have the greatest impact - 'lowest hanging fruits'.

39. Currently, the GBI does not include vulnerability to climate change. The GEF Secretariat has introduced a measure of country vulnerability in the new GPI.

40. Using the same indicators and methodology as for GEF-4, the global distribution of the CC allocations under Option A, with the scenario of US\$3.1 billion and a 20 percent exclusion calculated from the same GBI coupled with the same GPI for eligible countries as for the midpoint of GEF-4, is shown in Figure 1. A cap of 10 percent under the scenario was set for all countries.

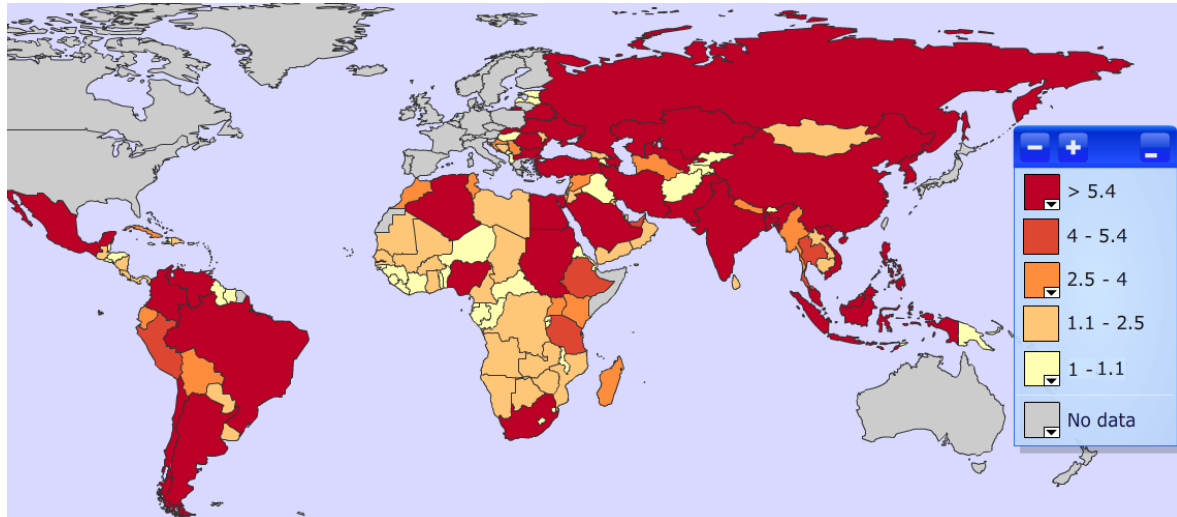


Figure 1. Potential Global distribution of the Climate Change Country Allocations for GEF-5 under \$ 3.1 Billion Scenario (million US dollars)

Biodiversity Focal Area GBI indicator

41. The GBI for the Biodiversity focal area used for the RAF in GEF-4 was based on eight indicators of species representation, threatened species, eco-region representation, and threatened eco-regions within a number of taxonomic groups in each country. These eight indicators were then combined to constitute the GBI for BD¹⁵. Marine biodiversity was weighted relatively low simply because the surface coverage area of marine ecosystems (the EEZ) is less than the coverage of terrestrial ecosystems.

42. In an attempt to simplify the Biodiversity GBI, it has been proposed that the IUCN Red List of the Threatened Species (IUCN Red List)¹⁶ be used in the STAR as a measure of the potential benefits that would accrue from GEF investment in a given country. Strong justifications supporting this proposal include:

- (a) Authority. The IUCN Red List is the most widely accepted metric of extinction risk, and it is used as an indicator for the CBD 2010 Target and for the MDG 7 on environmental sustainability.
- (b) Simplicity. While data from the IUCN Red List are incorporated into the existing GBI, the current GBI formulation is complicated. Deriving the measure of potential biodiversity benefit wholly from the IUCN Red List would have a great advantage of simplicity and would make the GBI more easily understood.
- (c) Performance tracking. The IUCN Red List is updated annually, with changes in status tracked differently from changes in knowledge.

¹⁵ For more specifications, please see http://www.thegef.org/uploadedFiles/Evaluation_Office/RAF/RAF_MTR-TECH_PAPER_2.pdf

¹⁶ The International Union for the Conservation of Nature and Natural Resources (IUCN) is the world's main authority on the conservation status of species.

- (d) Biome-coverage. The GBI has been criticized for failing to incorporate the benefits of conserving aquatic biodiversity – it minimally incorporates measures of potential freshwater or marine biodiversity benefits. By contrast, comprehensively assessed taxonomic groups on the IUCN Red List incorporate three predominately marine groups (sharks and rays, groupers, and corals) and two predominantly freshwater ones (turtles and amphibians), as well as four predominantly terrestrial groups (mammals, birds, conifers, cycads.)
- (e) In the GEF RAF/STAR *ad hoc* Committee meeting in Paris on March 19, 2009, several Council members gave positive comments on the use of the Red List and none opposed it.

43. A comparison of the benefit scores and ranks for countries using the IUCN Red List (literally, number of threatened species occurring in a given country) with those for the existing GBI reveals a number of interesting features:

- (a) National percentage scores and ranks are broadly similar between the IUCN Red List and the GBI. In both cases, the correlation between the two is highly statistically significant . The correlation is illustrated in Figure 3.
- (b) Very few countries have scores that differ widely between the two measures. Three South-east Asian countries have a notably higher percentage score using the IUCN Red List: Malaysia, Thailand, and Vietnam. Conversely, three countries have a notably lower score from the past GBI rank: Brazil (although it still scores high using the IUCN Red List), Russia, and the Democratic Republic of Congo (DRC).
- (c) Comparison of national ranks using the two measures may be more informative, because this will determine the GEF allocation under the STAR. About a dozen countries make large jumps in rank using the IUCN Red List compared to the existing GBI. By contrast, just a handful of countries make large drops down. This is balanced out by the fact that many countries shift down a few rank positions.
- (d) Most of the countries that make large jumps in rank positions using the IUCN Red List are island nations, especially those in the Pacific. Island biodiversity in general is heavily threatened by human impacts, and so island nations should be expected to rank highly. These large jumps in rank are likely explained by two additional factors. First, these nations have large areas of marine territory, and so the incorporation of measures of marine biodiversity benefits increases their ranks. Second, the existing GBI biases towards large countries, and so small nations such as the Pacific islands tend to rank low through this measure.
- (e) Three other countries that make large jumps in rank positions using the IUCN Red List are North-east African/Middle Eastern dry land countries: Jordan, Djibouti, and Eritrea. Bangladesh also makes a large jump up in rank.
- (f) The four countries that make large drops in rank using the IUCN Red List are Russia, DRC, Angola, and Zambia. These drops are likely due to the fact that the existing GBI is skewed towards large country size, as noted earlier, whereas the use of the IUCN Red List removes some of this bias.

44. STAP is working with the GEF Secretariat to improve the GBI for the biodiversity focal area, including a review of the existing data and indicator contribution to the current GBI.

45. The global distribution of the BD country allocations for BD eligible countries calculated with this benefit indicator and the same GPI as for the midpoint of GEF-4 is shown in Figure 2.

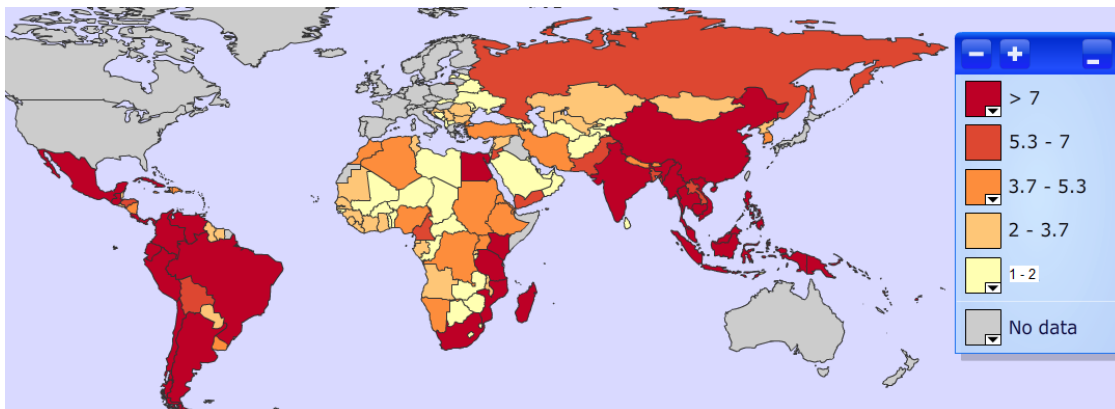


Figure 2. Global distribution of the Biodiversity Country Allocations for GEF-5 using IUCN Red List data under \$3.1 Billion Scenario (million US dollars)

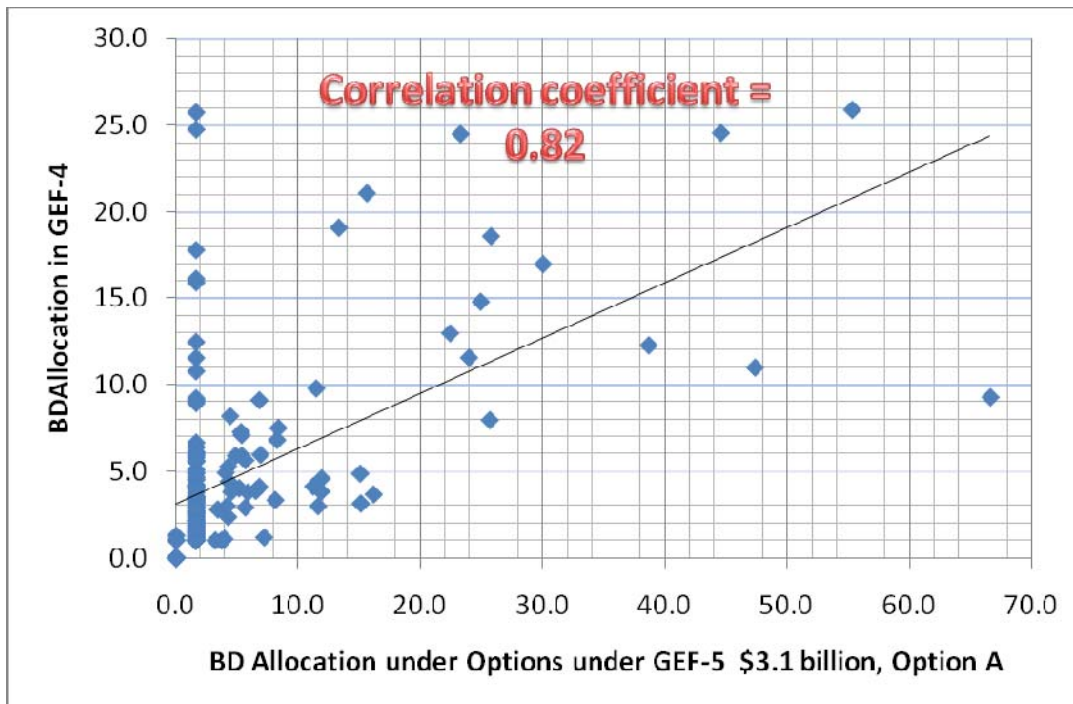


Figure 3. Correlation between country allocations with the proposed new GBI indicator versus the GBI used in GEF-4 for all eligible countries

Land Degradation Focal Area GBI indicator

46. For the Land Degradation focal area, a comprehensive indicator system based on global maps was developed by a GEF supported project.¹⁷ These Global maps show land cover, land productivity, water availability, and rural income level. Additional indicators including carbon stocks, ecosystem services, and human well-being are under development.

47. The Land Degradation Benefits Index used for this simulation combines a qualitative indicator of each country's vulnerability to land degradation with a quantitative indicator of the land area affected by recent land degradation. The qualitative vulnerability indicator provided by the Food and Agriculture Organization of the United Nations (FAO) includes the aspects of land cover, land use, soil 'health', slopes (leading to landslides), aridity, and floods.¹⁸ The quantitative indicator was extracted from a recently published paper.¹⁹ More details on the methodology are provided in a technical note prepared by Freddy Nachtergaele (FAO), posted on the GEF website: http://thegef.org/interior_right.aspx?id=24142

48. The global distribution country allocations based on the provisional LD benefit indicator, and the corresponding GPI value is shown in Figure 4.

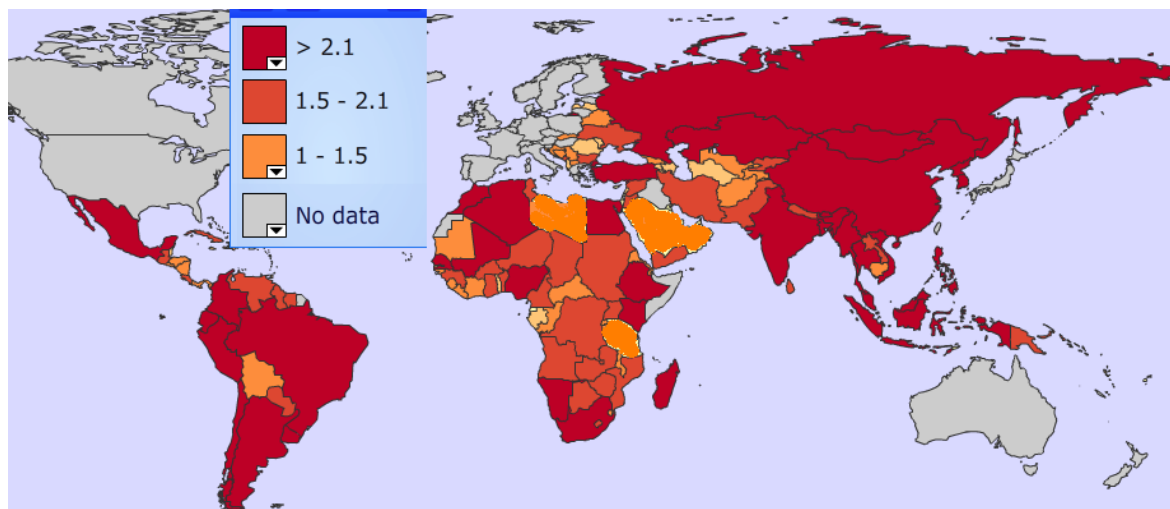


Figure 4. Global distribution of simulated Land Degradation Country Allocations for GEF-5 under \$3.1 Billion Scenario (million US dollars)

Chemicals Focal Area Indicators

¹⁷ The Land Degradation Assessment in drylands project (LADA) develops tools and methods to assess and quantify the nature, extent, severity and impacts of land degradation on dryland ecosystems, watersheds and river basins, carbon storage and biological diversity at a range of spatial and temporal scales
http://www.fao.org/nr/lada/index.php?option=com_content&task=blogsection&id=4&Itemid=87

¹⁸ Indicators for each of these six aspects were winsorized at 5 percent, normalized to a 0 – 1 range and then added to produce the overall vulnerability indicator.

¹⁹ Bai et al. (2008) Soil Use and Management 24:223-234. The area in each country affected by land degradation since 1980 (in km²) to the power of 0.3 (to compress the wide range of values) was multiplied by the vulnerability indicator to yield the GBI for LD.

49. For the Chemicals cluster, the GEF Secretariat used two indicators to calculate a Chemicals GBI. These are ‘agricultural land area’ and ‘industrial value-added’ in the individual recipient countries to capture chemical uses and releases in agricultural and industrial sectors of the recipient countries. This is in the absence of an otherwise readily available set of indicators that would cover all recipient countries and track more closely the global environmental benefits to be generated through GEF activities, in particular as relates to Persistent Organic Pollutants (POPs). Assumptions for doing this were based on: (1) the use and releases of chemicals in agriculture is proportional to the land for farming in the recipient countries – broadly speaking; (2) the consumption and/or environmental releases of industrial chemicals and un-intentionally produced chemicals is linearly correlated with industrial development – broadly speaking, which itself is correlated linearly with the value added in industrial sectors; (3) the use of chemicals in other sectors such as commercial and transportation sectors are linearly correlated to the industrial sector of the countries; and (4) other uses of chemicals such as in the health sector will be captured by the above indicators. With these assumptions, the calculated country index can represent the share of the country’s chemicals use and releases over the total amount of all recipient countries.

50. Chemicals is a newly-formed allocation label. It includes persistent organic pollutants and ozone layer depletion. The broad indicators described above would also be appropriate if the scope of GEF activities was expanded to support sound chemicals management more generally, as is under discussion in the context of the replenishment. The GEF Secretariat used Paragraph 9(b) of the GEF Instrument (GEF Instrument for the Establishment of the Restructured Global Environment Facility, March 2008) to evaluate the eligibility of the countries in Chemicals. More details on countries’ eligibility in CH are available in an MS-Excel sheet named “*EligibilityCH*” of the STAR model, which can be downloaded from the GEF website.

51. The distribution of country allocations for Chemicals calculated from this benefit indicator after combination with the relevant GPI value, as for GEF-4, is shown in Figure 5.

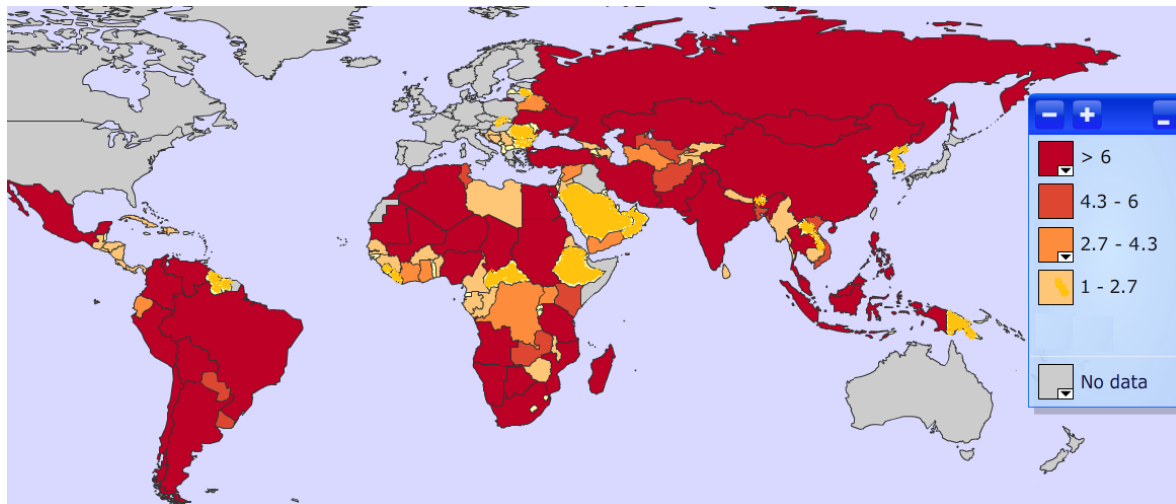


Figure 5. Global Distribution Simulated Country Allocations for Chemicals under \$3.1 Billion Scenario (million US dollars)

52. More detailed figures on climate change and biodiversity allocations presented in regional maps and assumptions are posted on the GEF Website:
http://thegef.org/interior_right.aspx?id=24142

International Waters Focal Area and a possible way forward

53. International Waters is the most challenging among all of the GEF focal areas in terms of developing a simple set of country indicators that would adequately reflect the scope and mission of the focal area. The resource allocation system is based on individual countries' performance and potential contribution to global environmental benefits whereas the IW focal area addresses transboundary water issues that can only be resolved by joint action from all the countries sharing the particular water body. IW has focused on building the foundational capacity and legal framework for such joint action on a regional or sub-regional scale.

54. Furthermore, the issues of IW are related to three fundamentally different types of transboundary water bodies: surface freshwater, groundwater, and large marine ecosystems. For the surface water bodies, there is the additional complication of upstream-downstream interactions between countries that share a river basin. Therefore, the nature of IW requires projects to be invested jointly between all countries which share the common water bodies. The GEF Secretariat has contracted three expert groups to develop indicators and retrieve global datasets for transboundary surface water systems, transboundary groundwater systems, and Large Marine Ecosystems. The GEF Secretariat jointly with STAP convened a workshop in December 2008 to assess progress on indicator development. The conclusion was that it is indeed possible to identify indicators for each of the three water body types, but it will be very difficult to identify simple common indicators supported by globally available data sets that would allow aggregation across the focal area. This work is still in progress.

55. As a temporary measure, the GEF Secretariat considered using the combined area (in km²) of each country's share of transboundary water bodies as a simple GBI proxy for IW. This indicator would need to be combined with a qualitative indicator that reflects the services from the transboundary water bodies as well as upstream-downstream aspects. Data for the areas of river basins and large marine ecosystems is available, whereas there are no authoritative data available on country share of transboundary aquifers. UNESCO has produced maps of these aquifers, but the boundaries are not agreed by all countries.

56. Therefore, while in principle allocations in IW could be generated using this framework, on the basis of comments from Council members and further technical advice from experts, there is an emerging consensus that for the time being the IW focal area should be kept entirely out of the STAR in GEF-5. At the same time, the GEF will continue to explore options for the development of a GBI for IW for possible future use.

Assumptions for STAR simulations

57. The STAR simulations are based on a set of assumptions that have been employed to show the impact of making changes to some, but not all, variables at any one time. Each assumption may be changed depending on the further guidance from Council:

- (a) In the February 2009 version of STAR, an overall set-aside level for Global and Regional Exclusions (GREs) was put at 20 percent in the STAR. These set-aside amounts were intended to finance a number of corporate programs including:²⁰
 - 1) “Global and Regional Exclusion” in BD and CC²¹
 - 2) “The Country Support Program”
 - 3) “The National Dialogue Initiative”
 - 4) “The Sub-Regional Consultations”
 - 5) Capacity Building Initiatives
 - 6) Enabling Activities

- (b) In this version of the STAR, the overall exclusion shares are assumed to be at 37.2 percent in the \$10 billion scenario, 34.3 percent in the \$5 billion scenario, and 32.5 percent in the \$3.1 billion scenario. These set-aside amounts are intended to finance a number of corporate programs and other activities including:
 - 1) Corporate Budget of the Secretariat, the Trustee, EO, and STAP
 - 2) “The Small Grants Program”
 - 3) “The Country Support Program”
 - 4) “The National Dialogue Initiative”
 - 5) “The Sub-Regional Consultations”
 - 6) “Global and Regional Exclusion” in all focal areas
 - 7) “The GEF Earth Fund” (Public-Private-Partnership)
 - 8) Set-aside for support through non-grant instruments
 - 9) Capacity Building Initiatives
 - 10) Enabling Activities

- (c) Missing data: For countries with missing data, a figure that represents the minimum figure among all the countries for that particular set of data is considered. For those countries which do not have data the minimum score for BD among all the countries which have any GBI data is 7.0. This same rule is applied to fill in the missing data of countries for any GBI and GPI as well.

- (d) The GPI dataset is very similar to the GPI used in GEF-4. For those countries, which did not have any GPI values in GEF-4, a minimum amount (2.18) has been applied.

²⁰ In the STAR meeting in March 2009 in Paris, Council members asked the GEF Secretariat to list fuller details of the set asides or so called exclusions.

²¹ As a result of the Council’s request for more detailed information on the “Global and Regional Exclusion”, the Secretariat will make information on the disposition of the funds available on the GEF website.

- (e) Allocation ceilings: As mentioned before, a cap of 15 percent for the Climate Change focal area has been applied and a 10 percent cap for all other focal areas has been applied.
- (f) Allocation floors: A new allocation floor of \$1 million is applied for each of the focal areas.
- (g) The simulations were carried out without the rules set under GEF-4 that allowed for “Group Allocations” and the 50 percent rule for first two years.²² Thus, all eligible countries are granted individual allocations, i.e. no single country is in the group allocation anymore.
- (h) The Small Grants Program, and the International Waters Focal Area remain outside of the STAR allocation process.
- (i) Three financial replenishment scenarios under different assumptions are presented in Table 1. Table 1 contains a number of references to familiar budget lines that are mentioned in the Programming paper for the Replenishment, namely the Non-Grants Transformation Fund and the Sustainable Forest Management Fund.

58. It should be noted that the \$5 billion scenario contains the following assumptions: a deduction of \$500 million is made for the climate change adaptation funds (LDCF and SCCF). As a result, the actual amounts of funds to be allocated for STAR are US\$ 4.5 billion in the second replenishment scenarios. Similarly, the actual proposed replenishment of GEF at \$10 billion includes \$1 billion for the climate change adaptation funds (LDCF and SCCF).²³ As such, the actual amounts of funds to be allocated for STAR are US\$ 9 billion in the third replenishment scenarios.

59. The \$5 billion and \$10 billion replenishment scenarios are assumed to lead to a larger proportion within the CC focal area, reflecting the assumption that climate change would be a major driver for a large replenishment. In line with this reasoning, replenishment of SCCF and LDCF has been provided for with a 10 percent share in the two higher scenarios. The ODS focal area is assumed to be already included in the Chemicals window under the two higher scenarios.

²² In GEF-4, over 100 countries were in the Group allocation, and each of the eligible countries could only use 50 percent of the allocated fund during the first two year period of GEF-4. In the GEF-5, all these rules were terminated in the allocation simulations.

²³ The actual decisions on resource mobilization and replenishment of the LDCF and SCCF are not covered in this paper.

Table 1 Scenarios and assumptions in GEF-5 allocation simulations

	GEF-4 Scenario	GEF-5 Scenarios		
		\$3.1billion	\$5billion	\$10billion
Total GEF Replenishment	3,130	3,130	5,000	10,000
LDCF/SCCF Adaptation	-	-	500	1,000
GEF Trust Fund Total	3,130	3,130	4,500	9,000
Corporate Programs	15	15	50	60
Small Grant Programs*		110	140	220
Earth Fund Public-Private-Partnership	-	-	100	500
Non-Grants Transformation Fund	-	-	-	170
Corporate Budget	120	120	150	200
sub-total Global Set-aside	135	245	440	1,150
<i>Climate Change Mitigation</i>	<i>1,000.0</i>	<i>1,000.0</i>	<i>1,790.0</i>	<i>3,500.0</i>
<i>Biodiversity</i>	<i>1,000.0</i>	<i>1,000.0</i>	<i>1,175.0</i>	<i>2,000.0</i>
<i>International Water</i>	<i>355.0</i>	<i>355.0</i>	<i>365.0</i>	<i>785.0</i>
<i>Chemicals</i>	<i>340.0</i>	<i>340.0</i>	<i>365.0</i>	<i>780.0</i>
<i>Land Degradation</i>	<i>300.0</i>	<i>300.0</i>	<i>365.0</i>	<i>785.0</i>
Total for all Focal Areas	2,995.0	2,995.0	4,060.0	7,850.0
Total GEF Trust Fund	3,130	3,130	4,500	9,000

Total for all Focal Areas	2,995.0	2,995.0	4,060.0	7,850.0
Sustainable Forest Management Fund	-	-	200.0	500.0
Climate Change Exclusion SFM	-	-	96.9	247.5
Biodiversity Exclusion SFM	-	-	63.6	141.4
International Water Exclusion SFM	-	-	19.8	55.5
Chemicals Exclusion SFM	-	-	-	-
Land Degradation Exclusion SFM	-	-	19.8	55.5
Sub-total	-	-	200.0	500.0
Climate Change global/regional Set-Aside	50.0	200.0	261.1	452.5
Biodiversity global/regional Set-Aside	50.0	200.0	171.4	258.6
International Water global/regional Set-Aside	-	71.0	345.2	729.5
Chemicals global/regional Set-Aside	-	68.0	73.0	156.0
Land Degradation global/regional Set-Aside	-	60.0	53.2	101.5
Sub-Total Focal Area Set-Aside	100.0	599.0	904.0	1,698.0
Net Climate Change Allocation	950.0	800.0	1,432.0	2,800.0
Net Biodiversity Allocation	950.0	800.0	940.0	1,600.0
Net International Water Allocation	-	-	-	-
Net Chemicals Allocation	-	272.0	292.0	624.0
Net Land Degradation Allocation	-	240.0	292.0	628.0
Sub-total under RAF/STAR Resource Allocation	1,900.0	2,112.0	2,956.0	5,652.0

* Note: SGP \$120 million in GEF4 was financed by taxation from focal areas.

3. PRESENTATION OF RESULTS

60. Results of three scenarios (GEF-5 \$3.1 billion, \$4.5 billion, and \$9 billion), under three Options (Options A, B and C), two caps, and the GPI used in GEF-4 are presented in Table 2. The first two columns in the Tables under the heading of “GEF-4 with \$3.1 billion replenishment” serve as a baseline and represent the allocations of CC and BD in GEF-4, according to the mid-term reallocation of June 2008. The average potential allocation for group countries, as of the mid-term reallocation, has been used to provide a notional figure for assigning a notional allocation for group allocation countries. The allocation figures, therefore, serve as a baseline to compare the GEF-5 allocation results in this scenario.

61. The next two columns under the heading of “GEF-5 with \$3.1 billion” show the results of a Two Star Option A or a business-as-usual option. Compared to the baseline of GEF-4 with \$3.1 billion, this option has the following fundamental difference: there are no countries with a group allocation.

62. Then, the next six columns under “GEF-5 \$3.1 billion” present the simulation results for Option B – the Three STAR Option. Lastly, the STAR is expanded to all the four focal areas (CC, BD, LD and CH including POPs and ODS), called Option C.

63. The same set of eight columns, as for \$3.1 billion, are then repeated in Table 2 to show the variations for the other replenishment scenarios of \$5 billion and \$10 billion.

4. CONCLUSIONS

Improvement of STAR over RAF

64. **STAR is an improved allocation system.** Following the Council guidance, the GEF Secretariat recommends to revise GBI and GPI, abolish unreasonable rules, change the floors of country allocations, and make STAR more simple and transparent. Applications of the STAR in all the GEF focal areas have also been simulated.

65. **STAR Increases country's project ownership.** In GEF-4 RAF, more than 100 countries were under the Group allocation, but not all these countries have received any funding. These countries were placed under the group allocation as a result of their performance and/or GBI values. In the STAR simulations with over \$3.1 billion replenishment, the allocation amounts for these countries will be larger than in GEF-4 and, by their nature, can lead to increased country ownership. The actual allocation amounts will, however, remain dependent on their performance (GPI) and the potential global environmental benefits in the focal areas.

Further Work and Guidance

66. **New GPI Work in Progress.** The GEF Secretariat will continue to work on refining the new GPI indicator. Based on Council guidance the Secretariat will further test indicators and their appropriateness for inclusion in the STAR.

67. **Continued work on GBI.** The GEF Secretariat is working with STAP on revising the topic of carbon intensity and looking to collect LULUCF data for all the countries. Once the data is ready, the GEF Secretariat will upgrade the CC indicator in the STAR. This work involves not only data collection, but also the development of a methodology to calculate allocation scores of the countries. Using these updated and new indicators may change the allocation results. The GEF Secretariat may present the results in the next version of the STAR paper.

68. **Third year reallocation for GEF-5:** As mentioned above, the GEF-5 allocation simulation abolished the "50 percent" rule as applied in GEF-4. However, it is necessary to have a new rule to help ensure that countries use their allocated resources. One option could be that if a country does not have any proposed projects by the end of the third year of the GEF-5 period, namely by the end of 2013, the unallocated funds shall be reallocated to the GEF regional or global programs/projects. This issue is not dealt with in this paper, but could be looked at in the future version of this paper.

69. **Programming for countries:** Since the "50 percent" rule has been abolished, in any period of GEF-5, the GEF Secretariat may receive more requests for funds than the available amount. The GEF Secretariat could therefore establish a pipeline, restricted to GEF-5, which will be used to determine the use of available resources in order to balance competing demands from countries and regions. In case of a shortage of funds, priority will be granted to national projects over global and regional projects.

70. **Other Considerations:** After this presentation of the indices and allocations derived from the GBI, GPI and NGPI in STAR, Council may wish to further adjust the allocations by including indices or other methods that respect regional balance required for delivery of GEF impact.

71. **Implementation of STAR:** Other issues related to implementation rules are still not addressed in this paper, since these rules are subject to replenishment plans and resource allocation options. Once the GEF Council forms a replenishment plan and gives clear guidance on which allocation option to move forward with, the GEF Secretariat will, taking into consideration the findings and recommendations of the MTR, propose modified and simplified implementation rules for the option.

Table 2 Results of allocation simulations (US\$ million)

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion										
	Baseline		A		B			C	A		B			C	A		B			C							
	CC	BD	CC	BD	CC	NR		CH	CC	BD	CC	NR		CH	CC	BD	CC	NR		CH							
	2008	2008				BD	LD	Sum				BD	LD	Sum				BD	LD	Sum							
Afghanistan	1.3	3.2	1.0	1.7	1.0	1.7	1.0	2.7	1.1	4.8	1.5	2.0	1.5	2.0	1.3	3.3	1.2	6.0	3.0	3.4	3.0	3.4	2.9	6.3	3.2	12.5	
Albania	1.3	1.6	1.0	1.9	1.0	1.9	1.0	2.9	1.0	4.9	1.0	2.2	1.0	2.2	1.1	3.3	1.0	5.3	1.9	3.8	1.9	3.8	2.5	6.3	1.0	9.2	
Algeria	9.3	4.0	8.4	3.9	8.4	3.9	2.5	6.4	3.3	18.1	15.6	4.6	15.6	4.6	3.2	7.7	3.6	26.9	30.9	7.7	30.9	7.7	7.2	15.0	9.6	55.4	
Angola	1.3	1.6	2.4	2.9	2.4	2.9	1.8	4.7	2.1	9.3	4.5	3.4	4.5	3.4	2.3	5.7	2.4	12.6	8.9	5.8	8.9	5.8	5.3	11.1	6.2	26.2	
Antigua and Barbuda	1.3	1.6	1.0	2.6	1.0	2.6	1.0	3.6	1.0	5.6	1.0	3.0	1.0	3.0	1.0	4.0	1.0	6.0	1.0	5.2	1.0	5.2	1.1	6.2	1.0	8.2	
Argentina	14.5	15.1	12.1	8.8	12.1	8.8	3.5	12.3	6.3	30.8	22.4	10.4	22.4	10.4	4.4	14.8	7.1	44.3	44.4	17.7	44.4	17.7	10.0	27.7	18.6	90.7	
Armenia	1.3	1.6	1.1	2.2	1.1	2.2	1.0	3.2	1.0	5.3	2.0	2.5	2.0	2.5	1.0	3.5	1.0	6.6	4.0	4.3	4.0	4.3	2.1	6.4	1.0	11.4	
Azerbaijan	6.0	1.6	6.0	1.7	6.0	1.7	1.0	2.7	1.0	9.7	11.1	2.0	11.1	2.0	1.0	3.0	1.0	15.1	22.0	3.4	22.0	3.4	1.9	5.3	1.4	28.8	
Bahamas	1.3	0.0	1.0	2.2	1.0	2.2	0.0	2.2	1.0	4.2	1.0	2.5	1.0	2.5	0.0	2.5	1.0	4.5	1.0	4.3	1.0	4.3	0.0	4.3	1.0	6.3	
Bahrain	1.3	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.7	0.0	1.7	0.0	0.0	0.0	0.0	1.7	3.3	0.0	3.3	0.0	0.0	0.0	0.0	3.3	
Bangladesh	7.4	1.6	6.1	5.5	6.1	5.5	2.0	7.5	1.0	14.7	11.3	6.5	11.3	6.5	2.6	9.0	1.1	21.5	22.5	11.0	22.5	11.0	5.9	16.9	3.0	42.4	
Barbados	1.3	0.0	1.0	3.4	1.0	3.4	0.0	3.4	1.0	5.4	1.0	4.0	1.0	4.0	0.0	4.0	1.0	6.0	1.0	6.8	1.0	6.8	0.0	6.8	1.0	8.8	
Belarus	8.4	1.6	6.8	1.0	6.8	1.0	1.0	2.0	1.0	9.8	12.6	1.0	12.6	1.0	1.2	2.2	1.0	15.8	25.0	1.6	25.0	1.6	2.8	4.4	2.2	31.6	
Belize	1.3	1.6	1.0	3.7	1.0	3.7	1.0	4.7	1.0	6.7	1.0	4.4	1.0	4.4	1.0	5.4	1.0	7.4	1.0	7.4	1.0	7.4	1.3	8.7	1.0	10.7	
Benin	1.3	1.6	1.0	1.9	1.0	1.9	1.4	3.3	1.0	5.3	1.2	2.3	1.2	2.3	1.8	4.0	1.0	6.3	2.5	3.9	2.5	3.9	4.0	7.9	1.0	11.4	
Bhutan	1.3	1.6	1.0	4.5	1.0	4.5	2.6	7.1	1.0	9.1	1.0	5.3	1.0	5.3	3.3	8.6	1.0	10.6	1.3	9.1	1.3	9.1	7.5	16.6	1.0	18.9	
Bolivia	3.4	11.6	2.9	6.5	2.9	6.5	1.2	7.7	1.6	12.2	5.3	7.6	5.3	7.6	1.5	9.1	1.8	16.2	10.5	13.0	10.5	13.0	3.5	16.4	4.7	31.7	
Bosnia and Herzegovina	1.3	1.6	2.2	1.6	2.2	1.6	1.3	2.9	1.0	6.0	4.0	1.9	4.0	1.9	1.6	3.5	1.0	8.5	8.0	3.2	8.0	3.2	3.7	6.9	1.0	15.8	
Botswana	1.3	1.6	2.2	1.7	2.2	1.7	1.9	3.6	1.6	7.4	4.1	2.0	4.1	2.0	2.4	4.4	1.8	10.2	8.1	3.4	8.1	3.4	5.4	8.8	4.7	21.6	
Brazil	41.4	66.6	34.5	21.9	34.5	21.9	3.9	25.8	12.5	72.8	63.8	25.7	63.8	25.7	4.9	30.6	14.0	108.4	126.5	43.8	126.5	43.8	11.1	54.9	36.7	218.2	
Brunei Darussalam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bulgaria	8.8	1.6	7.0	2.5	7.0	2.5	1.7	4.2	1.0	12.1	12.9	2.9	12.9	2.9	2.1	5.0	1.0	19.0	25.6	5.0	25.6	5.0	4.8	9.8	1.0	36.4	
Burkina Faso	1.3	1.6	2.1	1.1	2.1	1.1	1.4	2.5	1.0	5.7	3.9	1.3	3.9	1.3	1.8	3.1	1.0	8.1	7.8	2.3	7.8	2.3	4.1	6.3	1.8	15.9	
Burundi	1.3	1.6	1.0	1.8	1.0	1.8	1.0	2.9	1.0	4.9	1.0	2.1	1.0	2.1	1.3	3.5	1.0	5.5	1.0	3.6	1.0	3.6	3.0	6.7	1.0	8.7	
Cambodia	2.8	1.6	1.7	8.7	1.7	8.7	1.4	10.1	1.0	12.8	3.1	10.2	3.1	10.2	1.7	11.9	1.0	16.1	6.2	17.4	6.2	17.4	3.9	21.3	1.0	28.6	
Cameroon	1.3	11.2	2.3	7.0	2.3	7.0	1.8	8.8	1.0	12.1	4.2	8.3	4.2	8.3	2.2	10.5	1.0	15.7	8.3	14.1	8.3	14.1	5.1	19.2	1.7	29.2	
Cape Verde	1.3	3.7	1.0	1.8	1.0	1.8	1.0	2.8	1.0	4.8	1.0	2.1	1.0	2.1	1.0	3.1	1.0	5.1	1.0	3.5	1.0	3.5	1.0	4.5	1.0	6.5	

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion										
	Baseline		A		B			C	A		B			C	A		B			C							
	CC	BD	CC	BD	CC	NR	CH		CC	BD	CC	NR	CH		CC	BD	CC	NR	CH								
	2008	2008			BD	LD	Sum				BD	LD	Sum				BD	LD	Sum								
Cent African Rep	1.3	1.6	1.0	1.0	1.0	1.0	2.0	1.0	4.0	1.2	1.0	1.2	1.0	1.3	2.3	1.0	4.5	2.4	1.6	2.4	1.6	2.9	4.5	1.0	7.9		
Chad	1.3	1.6	1.6	1.2	1.6	1.2	1.4	2.7	1.4	5.7	2.9	1.4	2.9	1.4	1.8	3.3	1.6	7.8	5.8	2.4	5.8	2.4	4.2	6.6	4.2	16.6	
Chile	6.7	16.2	5.5	7.9	5.5	7.9	2.7	10.5	2.3	18.3	10.2	9.2	10.2	9.2	3.4	12.6	2.5	25.4	20.3	15.7	20.3	15.7	7.7	23.4	6.6	50.4	
China	154.5	47.4	85.1	21.8	85.1	21.8	5.8	27.7	19.8	132.6	157.7	25.7	157.7	25.7	7.4	33.0	22.1	212.8	312.8	43.7	312.8	43.7	16.8	60.5	58.0	431.4	
Colombia	10.3	38.7	9.0	23.9	9.0	23.9	2.7	26.7	2.9	38.5	16.6	28.1	16.6	28.1	3.5	31.6	3.3	51.4	32.9	47.9	32.9	47.9	7.9	55.8	8.5	97.2	
Comoros	1.3	1.6	1.0	3.8	1.0	3.8	1.0	4.8	1.0	6.8	1.0	4.5	1.0	4.5	1.0	5.5	1.0	7.5	1.0	7.6	1.0	7.6	1.0	8.6	1.0	10.6	
Congo, Dem. Rep.	1.3	11.9	2.2	4.6	2.2	4.6	1.5	6.2	1.0	9.3	4.0	5.5	4.0	5.5	1.9	7.4	1.0	12.4	7.9	9.3	7.9	9.3	4.4	13.7	2.4	24.1	
Congo, Rep.	1.3	1.6	1.0	1.7	1.0	1.7	1.0	2.7	1.0	4.7	1.0	2.0	1.0	2.0	1.3	3.3	1.0	5.3	2.0	3.4	2.0	3.4	3.0	6.4	1.2	9.6	
Cook Islands	1.3	1.6	1.0	2.5	1.0	2.5	1.0	3.5	1.0	5.5	1.0	2.9	1.0	2.9	1.0	3.9	1.0	5.9	1.0	5.0	1.0	5.0	1.0	6.0	1.0	8.0	
Costa Rica	1.3	11.9	1.5	9.4	1.5	9.4	1.7	11.1	1.0	13.6	2.9	11.1	2.9	11.1	2.1	13.2	1.0	17.0	5.7	18.8	5.7	18.8	4.8	23.6	1.7	31.0	
Côte d'Ivoire	1.3	3.4	1.0	3.5	1.0	3.5	1.4	4.9	1.0	6.9	1.7	4.2	1.7	4.2	1.7	5.9	1.0	8.5	3.3	7.1	3.3	7.1	3.9	11.0	2.3	16.6	
Croatia	3.3	1.6	2.7	2.7	2.7	2.7	1.2	3.8	1.0	7.5	4.9	3.2	4.9	3.2	1.5	4.6	1.0	10.5	9.7	5.4	9.7	5.4	3.4	8.7	1.8	20.2	
Cuba	4.4	15.1	3.5	10.3	3.5	10.3	1.9	12.2	1.0	16.7	6.4	12.1	6.4	12.1	2.4	14.6	1.0	22.0	12.8	20.7	12.8	20.7	5.5	26.2	1.4	40.4	
Cyprus	1.3	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	
Czech Republic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Djibouti	1.3	1.6	1.0	4.7	1.0	4.7	1.3	6.0	1.0	8.0	1.0	5.5	1.0	5.5	1.6	7.1	1.0	9.1	1.0	9.3	1.0	9.3	3.7	13.0	1.0	15.0	
Dominica	1.3	1.6	1.0	2.7	1.0	2.7	1.0	3.7	1.0	5.7	1.0	3.2	1.0	3.2	1.0	4.2	1.0	6.2	1.0	5.4	1.0	5.4	1.0	6.4	1.0	8.4	
Dominican Republic	1.3	5.9	2.2	5.1	2.2	5.1	1.3	6.4	1.0	9.6	4.0	6.0	4.0	6.0	1.7	7.7	1.0	12.7	7.9	10.2	7.9	10.2	3.8	14.1	1.5	23.5	
Ecuador	1.3	24.0	2.5	18.3	2.5	18.3	2.3	20.6	1.0	24.1	4.7	21.5	4.7	21.5	2.9	24.4	1.0	30.1	9.3	36.6	9.3	36.6	6.7	43.2	2.4	54.8	
Egypt	11.8	4.3	9.3	7.6	9.3	7.6	1.9	9.6	1.9	20.8	17.2	9.0	17.2	9.0	2.5	11.4	2.2	30.8	34.1	15.3	34.1	15.3	5.6	20.9	5.7	60.8	
El Salvador	1.3	1.6	1.0	2.9	1.0	2.9	1.2	4.1	1.0	6.1	1.8	3.4	1.8	3.4	1.5	4.9	1.0	7.7	3.6	5.7	3.6	5.7	3.5	9.2	1.1	13.9	
Equatorial Guinea	1.3	1.6	1.0	2.2	1.0	2.2	1.0	3.2	1.0	5.2	1.0	2.6	1.0	2.6	1.0	3.6	1.0	5.6	1.2	4.3	1.2	4.3	1.1	5.4	1.0	7.6	
Eritrea	1.3	1.6	1.0	4.1	1.0	4.1	1.3	5.3	1.0	7.3	1.0	4.8	1.0	4.8	1.6	6.4	1.0	8.4	1.2	8.1	1.2	8.1	3.6	11.7	1.0	14.0	
Estonia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethiopia	5.2	8.1	4.2	4.6	4.2	4.6	3.4	8.0	1.0	13.2	7.8	5.5	7.8	5.5	4.2	9.7	1.0	18.5	15.4	9.3	15.4	9.3	9.7	19.0	1.0	35.4	
Fiji	1.3	4.9	1.0	8.2	1.0	8.2	1.0	9.2	1.0	11.2	1.0	9.6	1.0	9.6	1.0	10.6	1.0	12.6	1.1	16.4	1.1	16.4	1.0	17.4	1.0	19.5	
Gabon	1.3	1.6	1.0	2.4	1.0	2.4	1.0	3.4	1.0	5.4	1.4	2.8	1.4	2.8	1.0	3.8	1.0	6.2	2.8	4.8	2.8	4.8	2.2	7.0	1.2	11.0	
Gambia	1.3	1.6	1.0	1.7	1.0	1.7	1.0	2.7	1.0	4.7	1.0	2.0	1.0	2.0	1.1	3.1	1.0	5.1	1.0	3.4	1.0	3.4	2.5	5.9	1.0	7.9	
Georgia	1.3	1.6	2.0	1.7	2.0	1.7	1.0	2.7	1.0	5.7	3.6	2.1	3.6	2.1	1.2	3.3	1.0	7.9	7.2	3.5	7.2	3.5	2.8	6.3	1.0	14.5	
Ghana	1.3	1.6	1.6	3.6	1.6	3.6	1.8	5.4	1.0	7.9	2.9	4.3	2.9	4.3	2.2	6.5	1.0	10.3	5.7	7.3	5.7	7.3	5.0	12.3	2.4	20.4	

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion										
	Baseline		A		B			C	A		B			C	A		B			C							
	CC	BD	CC	BD	CC	NR	CH		CC	BD	CC	NR	CH		CC	BD	CC	NR	CH								
	2008	2008			BD	LD	Sum				BD	LD	Sum				BD	LD	Sum								
Grenada	1.3	1.6	1.0	2.7	1.0	2.7	1.0	3.7	1.0	5.7	1.0	3.1	1.1	4.3	1.0	6.3	1.0	5.3	1.0	5.3	2.6	7.9	1.0	9.9			
Guatemala	1.3	8.3	1.6	8.7	1.6	8.7	1.5	10.2	1.0	12.8	2.9	10.2	2.9	10.2	1.9	12.1	1.0	16.0	5.8	17.4	5.8	17.4	4.3	21.7	1.4	28.9	
Guinea	1.3	1.6	1.0	2.8	1.0	2.8	1.7	4.5	1.0	6.5	1.3	3.3	1.3	3.3	2.1	5.4	1.0	7.7	2.6	5.6	2.6	5.6	4.8	10.4	1.5	14.5	
Guinea-Bissau	1.3	1.6	1.0	1.4	1.0	1.4	1.2	2.6	1.0	4.6	1.0	1.7	1.0	1.7	1.5	3.2	1.0	5.2	1.0	2.8	1.0	2.8	3.4	6.3	1.0	8.3	
Guyana	1.3	1.6	1.0	2.4	1.0	2.4	1.5	3.9	1.0	5.9	1.0	2.8	1.0	2.8	1.9	4.7	1.0	6.7	1.2	4.8	1.2	4.8	4.3	9.1	1.0	11.4	
Haiti	1.3	4.3	1.0	4.9	1.0	4.9	1.2	6.0	1.0	8.0	1.0	5.7	1.0	5.7	1.5	7.2	1.0	9.2	1.4	9.7	1.4	9.7	3.4	13.1	1.0	15.5	
Honduras	1.3	6.9	1.0	6.6	1.0	6.6	1.2	7.9	1.0	9.9	1.8	7.8	1.8	7.8	1.6	9.4	1.0	12.2	3.6	13.3	3.6	13.3	3.6	16.9	1.0	21.5	
Hungary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
India	76.0	30.0	59.4	20.4	59.4	20.4	3.8	24.2	9.2	92.8	109.9	24.0	109.9	24.0	4.8	28.7	10.3	148.9	218.0	40.8	218.0	40.8	10.8	51.7	27.1	296.8	
Indonesia	18.4	44.6	15.8	26.1	15.8	26.1	2.5	28.6	4.1	48.5	29.1	30.7	29.1	30.7	3.2	33.9	4.6	67.6	57.8	52.3	57.8	52.3	7.3	59.5	12.0	129.3	
Iran	18.0	6.8	15.0	4.3	15.0	4.3	1.7	6.0	3.0	24.0	27.7	5.1	27.7	5.1	2.2	7.2	3.4	38.3	54.9	8.6	54.9	8.6	4.9	13.5	8.9	77.4	
Iraq	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	
Israel	1.3	0.0	2.8	0.0	2.8	0.0	0.0	0.0	0.0	2.8	5.1	0.0	5.1	0.0	0.0	0.0	0.0	5.1	10.2	0.0	10.2	0.0	0.0	0.0	0.0	10.2	
Jamaica	1.3	5.2	1.0	4.5	1.0	4.5	1.0	5.5	1.0	7.5	1.6	5.3	1.6	5.3	1.1	6.4	1.0	9.0	3.2	9.1	3.2	9.1	2.5	11.5	1.0	15.8	
Jordan	1.3	1.6	1.4	5.5	1.4	5.5	1.5	7.0	1.0	9.4	2.6	6.5	2.6	6.5	1.8	8.4	1.0	12.0	5.2	11.1	5.2	11.1	4.2	15.3	1.0	21.5	
Kazakhstan	15.2	5.7	13.0	3.2	13.0	3.2	3.7	6.9	6.3	26.2	24.1	3.8	24.1	3.8	4.6	8.4	7.0	39.6	47.8	6.4	47.8	6.4	10.6	17.0	18.5	83.4	
Kenya	4.0	8.4	3.5	8.1	3.5	8.1	2.2	10.3	1.2	15.0	6.6	9.5	6.6	9.5	2.8	12.3	1.4	20.2	13.0	16.1	13.0	16.1	6.3	22.5	3.6	39.1	
Kiribati	1.3	1.6	1.0	5.7	1.0	5.7	1.0	6.7	1.0	8.7	1.0	6.7	1.0	6.7	1.0	7.7	1.0	9.7	1.0	11.5	1.0	11.5	1.0	12.5	1.0	14.5	
Korea, Dem. Rep.	7.0	1.6	5.8	3.0	5.8	3.0	2.3	5.3	1.0	12.1	10.7	3.5	10.7	3.5	3.0	6.5	1.0	18.1	21.2	5.9	21.2	5.9	6.8	12.7	1.0	34.9	
Korea, Rep. of	1.3	1.6	28.0	4.9	28.0	4.9	3.3	8.2	9.2	45.4	51.8	5.8	51.8	5.8	4.2	10.0	10.2	72.0	102.8	9.9	102.8	9.9	9.5	19.4	26.9	149.1	
Kuwait	1.3	0.0	2.2	0.0	2.2	0.0	0.0	0.0	0.0	2.2	4.1	0.0	4.1	0.0	0.0	0.0	0.0	4.1	8.0	0.0	8.0	0.0	0.0	0.0	0.0	8.0	
Kyrgyzstan	1.3	1.6	1.1	1.1	1.1	1.1	1.8	2.8	1.0	4.9	2.0	1.3	2.0	1.3	2.2	3.5	1.0	6.5	4.0	2.2	4.0	2.2	5.1	7.2	1.5	12.7	
Lao, People's Dem. Rep.	1.3	5.4	1.3	6.1	1.3	6.1	1.9	7.9	1.0	10.3	2.4	7.1	2.4	7.1	2.4	9.5	1.0	12.9	4.8	12.2	4.8	12.2	5.4	17.5	1.0	23.4	
Latvia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lebanon	1.3	1.6	1.3	2.1	1.3	2.1	1.0	3.1	1.0	5.5	2.5	2.5	2.5	2.5	1.0	3.5	1.0	7.0	4.9	4.2	4.9	4.2	2.0	6.2	1.0	12.2	
Lesotho	1.3	0.0	1.0	1.0	1.0	1.0	1.5	2.5	1.0	4.5	1.0	1.0	1.0	1.0	1.9	2.9	1.0	4.9	1.3	1.7	1.3	1.7	4.4	6.0	1.0	8.3	
Liberia	1.3	1.6	1.0	2.4	1.0	2.4	1.0	3.4	1.0	5.4	1.0	2.8	1.0	2.8	1.2	4.0	1.0	6.0	1.6	4.8	1.6	4.8	2.7	7.5	1.0	10.1	
Libyan Arab Jamahiriya	1.3	1.6	2.2	1.6	2.2	1.6	1.0	2.6	1.0	5.7	4.0	1.9	4.0	1.9	1.0	2.9	1.0	7.9	7.9	3.2	7.9	3.2	1.0	4.2	1.5	13.6	
Liechtenstein	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion									
	Baseline		A		B			C	A		B			C	A		B			C						
	CC	BD	CC	BD	CC	NR	CH		CC	BD	CC	NR	CH		CC	BD	CC	NR	CH							
	2008	2008			BD	LD	Sum				BD	LD	Sum				BD	LD	Sum							
Macedonia	1.3	1.6	1.3	1.0	1.3	1.0	1.0	2.0	1.0	4.3	2.3	1.1	2.3	1.1	1.3	2.4	1.0	5.7	4.7	1.9	4.7	1.9	2.9	4.8	1.0	10.4
Madagascar	1.3	24.9	2.5	16.2	2.5	16.2	2.0	18.2	1.8	22.5	4.7	19.0	4.7	19.0	2.5	21.6	2.0	28.3	9.3	32.4	9.3	32.4	5.7	38.2	5.3	52.8
Malawi	1.3	4.3	1.0	2.3	1.0	2.3	1.1	3.4	1.0	5.4	1.3	2.7	1.3	2.7	1.4	4.1	1.0	6.4	2.6	4.6	2.6	4.6	3.1	7.7	1.0	11.3
Malaysia	11.8	15.6	9.4	25.9	9.4	25.9	2.8	28.8	3.0	41.3	17.5	30.5	17.5	30.5	3.6	34.1	3.4	55.0	34.7	51.9	34.7	51.9	8.2	60.1	8.9	103.7
Maldives	1.3	1.6	1.0	4.5	1.0	4.5	1.0	5.5	1.0	7.5	1.0	5.3	1.0	5.3	1.0	6.3	1.0	8.3	1.0	8.9	1.0	8.9	1.0	9.9	1.0	11.9
Mali	1.3	1.6	2.5	1.6	2.5	1.6	1.9	3.6	1.6	7.6	4.5	1.9	4.5	1.9	2.5	4.4	1.8	10.7	9.0	3.3	9.0	3.3	5.6	8.9	4.7	22.6
Malta	1.3	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0
Marshall Islands	1.3	1.6	1.0	5.2	1.0	5.2	1.0	6.2	1.0	8.2	1.0	6.2	1.0	6.2	1.0	7.2	1.0	9.2	1.0	10.5	1.0	10.5	1.0	11.5	1.0	13.5
Mauritania	1.3	1.6	1.3	2.7	1.3	2.7	1.2	3.9	1.6	6.8	2.4	3.2	2.4	3.2	1.5	4.7	1.8	8.8	4.8	5.5	4.8	5.5	3.4	8.8	4.6	18.2
Mauritius	1.3	5.4	1.0	8.5	1.0	8.5	1.0	9.5	1.0	11.5	1.0	9.9	1.0	9.9	1.0	10.9	1.0	12.9	1.7	16.9	1.7	16.9	1.1	18.1	1.0	20.8
Mexico	31.6	55.3	26.9	29.7	26.9	29.7	2.9	32.5	8.9	68.4	49.7	34.9	49.7	34.9	3.6	38.5	10.0	98.2	98.6	59.4	98.6	59.4	8.2	67.6	26.2	192.5
Micronesia (Federated States of)	1.3	1.6	1.0	7.6	1.0	7.6	1.0	8.6	1.0	10.6	1.0	8.9	1.0	8.9	1.0	9.9	1.0	11.9	1.0	15.1	1.0	15.1	1.0	16.1	1.0	18.1
Moldova, Rep. of	1.3	1.6	1.6	1.4	1.6	1.4	1.0	2.4	1.0	4.9	2.9	1.6	2.9	1.6	1.0	2.7	1.0	6.5	5.7	2.8	5.7	2.8	2.3	5.1	1.0	11.8
Mongolia	1.3	4.2	2.0	2.5	2.0	2.5	2.1	4.7	3.8	10.5	3.8	3.0	3.8	3.0	2.7	5.7	4.2	13.7	7.5	5.1	7.5	5.1	6.1	11.2	11.1	29.8
Montenegro	1.3	1.6	1.0	1.0	1.0	1.0	1.4	2.4	1.0	4.4	1.0	1.1	1.0	1.1	1.8	2.9	1.0	4.9	1.8	1.9	1.8	1.9	4.1	5.9	1.0	8.8
Morocco	4.5	4.5	4.0	3.9	4.0	3.9	2.8	6.6	1.9	12.5	7.4	4.5	7.4	4.5	3.5	8.0	2.1	17.5	14.7	7.7	14.7	7.7	8.0	15.7	5.5	35.9
Mozambique	1.3	6.8	1.6	7.4	1.6	7.4	1.8	9.2	1.7	12.5	3.0	8.7	3.0	8.7	2.3	11.0	1.9	15.9	5.9	14.8	5.9	14.8	5.3	20.0	5.0	31.0
Myanmar (Burma)	1.3	1.6	3.3	7.4	3.3	7.4	2.2	9.6	1.0	13.9	6.0	8.7	6.0	8.7	2.8	11.5	1.0	18.5	12.0	14.8	12.0	14.8	6.4	21.2	1.6	34.8
Namibia	1.3	6.5	1.2	3.9	1.2	3.9	2.8	6.7	1.8	9.7	2.2	4.6	2.2	4.6	3.6	8.1	2.0	12.4	4.5	7.8	4.5	7.8	8.1	15.9	5.3	25.6
Nauru	1.3	1.6	1.0	3.5	1.0	3.5	1.0	4.5	1.0	6.5	1.0	4.1	1.0	4.1	1.0	5.1	1.0	7.1	1.0	6.9	1.0	6.9	1.0	7.9	1.0	9.9
Nepal	1.3	1.6	2.6	4.8	2.6	4.8	1.7	6.5	1.0	10.1	4.7	5.6	4.7	5.6	2.2	7.8	1.0	13.5	9.4	9.6	9.4	9.6	5.0	14.5	1.0	24.9
Nicaragua	1.3	4.1	1.2	4.3	1.2	4.3	1.4	5.7	1.0	7.8	2.2	5.1	2.2	5.1	1.7	6.8	1.0	10.0	4.3	8.6	4.3	8.6	3.9	12.5	1.1	18.0
Niger	1.3	1.6	1.0	1.2	1.0	1.2	1.5	2.7	1.4	5.1	1.7	1.4	1.7	1.4	1.8	3.3	1.6	6.6	3.4	2.5	3.4	2.5	4.2	6.7	4.1	14.2
Nigeria	11.3	5.7	10.3	4.2	10.3	4.2	2.0	6.2	3.0	19.5	19.0	5.0	19.0	5.0	2.6	7.5	3.4	29.9	37.7	8.4	37.7	8.4	5.8	14.3	8.9	60.8
Niue	1.3	1.6	1.0	2.1	1.0	2.1	1.0	3.1	1.0	5.1	1.0	2.5	1.0	2.5	1.0	3.5	1.0	5.5	1.0	4.2	1.0	4.2	1.0	5.2	1.0	7.2
Oman	1.3	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.1	0.0	2.1	0.0	0.0	0.0	0.0	2.1	4.1	0.0	4.1	0.0	0.0	0.0	0.0	4.1
Pakistan	12.8	5.3	9.4	6.0	9.4	6.0	1.6	7.6	2.0	19.0	17.5	7.1	17.5	7.1	2.0	9.1	2.2	28.8	34.7	12.1	34.7	12.1	4.6	16.7	5.7	57.1
Palau	1.3	1.6	1.0	5.1	1.0	5.1	1.0	6.1	1.0	8.1	1.0	6.0	1.0	6.0	1.0	7.0	1.0	9.0	1.0	10.2	1.0	10.2	1.0	11.2	1.0	13.2
Panama	1.3	11.5	1.2	9.0	1.2	9.0	1.2	10.1	1.0	12.3	2.2	10.5	2.2	10.5	1.5	12.0	1.0	15.2	4.4	17.9	4.4	17.9	3.4	21.3	1.0	26.7
Papua New Guinea	1.3	13.3	1.0	10.7	1.0	10.7	1.7	12.4	1.0	14.4	1.0	12.5	1.0	12.5	2.1	14.7	1.0	16.7	1.7	21.3	1.7	21.3	4.9	26.2	1.0	28.9

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion									
	Baseline		A		B			C	A		B			C	A		B			C						
	CC	BD	CC	BD	CC	NR	CH		CC	BD	CC	NR	CH		CC	BD	CC	NR	CH							
	2008	2008			BD	LD	Sum				BD	LD	Sum				BD	LD	Sum							
Paraguay	1.3	1.6	1.7	2.9	1.7	2.9	1.5	4.4	1.0	7.1	3.1	3.4	3.1	3.4	1.9	5.3	1.1	9.5	6.1	5.8	6.1	5.8	4.3	10.1	2.9	19.1
Peru	4.9	25.8	4.0	15.3	4.0	15.3	3.1	18.5	1.7	24.2	7.4	18.0	7.4	18.0	4.0	22.0	1.9	31.3	14.8	30.7	14.8	30.7	9.0	39.7	4.9	59.4
Philippines	8.0	23.3	7.2	19.8	7.2	19.8	2.6	22.5	1.7	31.4	13.4	23.3	13.4	23.3	3.3	26.7	1.9	41.9	26.6	39.7	26.6	39.7	7.6	47.3	4.9	78.8
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Qatar	1.3	0.0	1.4	0.0	1.4	0.0	0.0	0.0	0.0	1.4	2.6	0.0	2.6	0.0	0.0	0.0	0.0	2.6	5.2	0.0	5.2	0.0	0.0	0.0	0.0	5.2
Romania	15.5	1.6	13.1	2.4	13.1	2.4	1.0	3.4	0.0	16.6	24.3	2.9	24.3	2.9	1.0	3.9	0.0	28.2	48.2	4.9	48.2	4.9	1.2	6.1	0.0	54.3
Russian Federation	87.1	25.7	78.4	6.1	78.4	6.1	4.6	10.8	8.8	98.0	145.0	7.2	145.0	7.2	5.8	13.1	9.8	167.9	287.7	12.3	287.7	12.3	13.3	25.6	25.8	339.1
Rwanda	1.3	1.6	1.0	2.8	1.0	2.8	1.0	3.9	1.0	5.9	1.6	3.3	1.6	3.3	1.3	4.7	1.0	7.2	3.1	5.7	3.1	5.7	3.0	8.7	1.0	12.8
Saint Kitts and Nevis	1.3	1.6	1.0	2.1	1.0	2.1	1.0	3.1	1.0	5.1	1.0	2.5	1.0	2.5	1.0	3.5	1.0	5.5	1.0	4.2	1.0	4.2	1.0	5.2	1.0	7.2
Saint Lucia	1.3	1.6	1.0	2.8	1.0	2.8	1.0	3.8	1.0	5.8	1.0	3.2	1.0	3.2	1.0	4.2	1.0	6.2	1.0	5.5	1.0	5.5	1.0	6.5	1.0	8.5
Saint Vincent and the Grenadines	1.3	1.6	1.0	2.5	1.0	2.5	1.0	3.5	1.0	5.5	1.0	2.9	1.0	2.9	1.0	3.9	1.0	5.9	1.0	4.9	1.0	4.9	1.0	5.9	1.0	7.9
Samoa	1.3	1.6	1.0	5.7	1.0	5.7	1.0	6.7	1.0	8.7	1.0	6.8	1.0	6.8	1.0	7.8	1.0	9.8	1.0	11.5	1.0	11.5	1.0	12.5	1.0	14.5
San Marino	1.3	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0
São Tomé and Príncipe	1.3	1.6	1.0	1.8	1.0	1.8	1.0	2.8	1.0	4.8	1.0	2.1	1.0	2.1	1.0	3.1	1.0	5.1	1.0	3.6	1.0	3.6	1.0	4.6	1.0	6.6
Saudi Arabia	1.3	0.0	8.5	0.0	8.5	0.0	0.0	0.0	3.0	11.6	15.8	0.0	15.8	0.0	0.0	0.0	3.4	19.2	31.4	0.0	31.4	0.0	0.0	0.0	8.9	40.3
Senegal	1.3	1.6	1.5	3.4	1.5	3.4	2.0	5.4	1.0	7.9	2.8	4.0	2.8	4.0	2.5	6.5	1.0	10.3	5.5	6.9	5.5	6.9	5.6	12.5	1.5	19.5
Serbia	3.5	1.6	3.0	2.4	3.0	2.4	1.3	3.7	1.0	7.8	5.6	2.8	5.6	2.8	1.7	4.5	1.0	11.1	11.1	4.8	11.1	4.8	3.8	8.6	1.2	21.0
Seychelles	1.3	1.6	1.0	4.4	1.0	4.4	1.0	5.4	1.0	7.4	1.0	5.2	1.0	5.2	1.0	6.2	1.0	8.2	1.0	8.9	1.0	8.9	1.0	9.9	1.0	11.9
Sierra Leone	1.3	1.6	1.0	2.1	1.0	2.1	1.3	3.5	1.0	5.5	1.0	2.5	1.0	2.5	1.6	4.2	1.0	6.2	1.1	4.3	1.1	4.3	3.8	8.1	1.0	10.1
Singapore	1.3	0.0	3.8	0.0	3.8	0.0	0.0	0.0	1.0	4.8	7.0	0.0	7.0	0.0	0.0	0.0	1.1	8.1	13.8	0.0	13.8	0.0	0.0	0.0	3.0	16.8
Slovakia	6.4	1.6	5.4	1.5	5.4	1.5	1.4	2.9	1.0	9.3	10.0	1.8	10.0	1.8	1.7	3.5	1.0	14.5	19.9	3.0	19.9	3.0	4.0	7.0	2.3	29.2
Solomon Islands	1.3	1.6	1.0	7.7	1.0	7.7	1.0	8.7	1.0	10.7	1.0	9.1	1.0	9.1	1.0	10.1	1.0	12.1	1.0	15.4	1.0	15.4	1.2	16.7	1.0	18.7
Somalia	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.0	2.5	0.0	0.0	0.0	0.0	1.9	1.9	1.0	2.9	0.0	0.0	0.0	0.0	4.4	4.4	1.0	5.4
South Africa	26.6	22.4	22.5	11.8	22.5	11.8	3.8	15.5	5.7	43.8	41.6	13.8	41.6	13.8	4.8	18.6	6.4	66.6	82.6	23.5	82.6	23.5	10.9	34.4	16.8	133.8
Sri Lanka	1.3	7.2	1.8	1.0	1.8	1.0	1.5	2.5	1.0	5.3	3.3	1.0	3.3	1.0	1.9	2.9	1.0	7.2	6.5	1.7	6.5	1.7	4.3	6.0	1.2	13.7
Sudan	6.4	4.4	5.5	4.5	5.5	4.5	1.9	6.5	3.4	15.4	10.1	5.3	10.1	5.3	2.4	7.8	3.8	21.7	20.1	9.1	20.1	9.1	5.6	14.6	10.1	44.8
Suriname	1.3	1.6	1.0	2.1	1.0	2.1	1.6	3.7	1.0	5.7	1.0	2.5	1.0	2.5	2.0	4.5	1.0	6.5	1.7	4.2	1.7	4.2	4.5	8.7	1.0	11.4
Swaziland	1.3	1.6	1.0	1.6	1.0	1.6	1.3	2.9	1.0	4.9	1.0	1.8	1.0	1.8	1.6	3.5	1.0	5.5	1.1	3.1	1.1	3.1	3.7	6.8	1.0	8.9
Syrian Arab Republic	5.0	1.6	3.8	3.0	3.8	3.0	1.5	4.5	1.0	9.3	7.1	3.5	7.1	3.5	1.9	5.4	1.1	13.6	14.1	6.0	14.1	6.0	4.3	10.3	2.9	27.2
Tajikistan	1.3	1.6	1.0	1.3	1.0	1.3	1.2	2.5	1.0	4.5	1.8	1.6	1.8	1.6	1.5	3.1	1.0	5.8	3.6	2.7	3.6	2.7	3.4	6.1	1.0	10.6

	GEF4 \$3.1 billion		Options under GEF-5 \$3.1 billion							Options under GEF-5 \$4.5 billion							Options under GEF-5 \$9 billion									
	Baseline		A		B			C	A		B			C	A		B			C						
	CC	BD	CC	BD	CC	NR	CH		CC	BD	CC	NR	CH		CC	BD	CC	NR	CH							
	2008	2008			BD	LD	Sum				BD	LD	Sum				BD	LD	Sum							
Tanzania	5.4	1.6	4.5	11.6	4.5	11.6	1.0	12.6	1.5	18.6	8.3	13.6	8.3	13.6	1.0	14.6	1.7	24.7	16.6	23.2	16.6	23.2	1.0	24.2	4.4	45.2
Thailand	16.4	1.6	13.9	21.8	13.9	21.8	3.4	25.2	3.9	43.0	25.6	25.6	25.6	25.6	4.3	29.9	4.3	59.9	50.8	43.6	50.8	43.6	9.8	53.5	11.4	115.7
Timor-Leste	1.3	1.6	1.0	1.1	1.0	1.1	1.0	2.1	1.0	4.1	1.0	1.3	1.0	1.3	1.0	2.3	1.0	4.3	1.4	2.2	1.4	2.2	1.0	3.2	1.0	5.6
Togo	1.3	1.6	1.0	1.6	1.0	1.6	1.0	2.6	1.0	4.6	1.0	1.9	1.0	1.9	1.2	3.1	1.0	5.1	1.5	3.3	1.5	3.3	2.6	5.9	1.0	8.4
Tokelau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
Tonga	1.3	1.6	1.0	3.4	1.0	3.4	1.0	4.4	1.0	6.4	1.0	4.0	1.0	4.0	1.0	5.0	1.0	7.0	1.0	6.7	1.0	6.7	1.0	7.7	1.0	9.7
Trinidad and Tobago	1.3	1.6	2.6	3.1	2.6	3.1	1.0	4.1	1.0	7.7	4.8	3.6	4.8	3.6	1.0	4.6	1.0	10.4	9.4	6.2	9.4	6.2	1.9	8.0	1.2	18.7
Tunisia	3.5	1.6	3.0	3.6	3.0	3.6	1.9	5.5	1.0	9.5	5.6	4.2	5.6	4.2	2.4	6.6	1.1	13.3	11.1	7.1	11.1	7.1	5.5	12.7	3.0	26.7
Turkey	19.4	1.6	16.4	4.4	16.4	4.4	2.0	6.4	4.5	27.4	30.4	5.2	30.4	5.2	2.6	7.7	5.1	43.2	60.3	8.8	60.3	8.8	5.8	14.6	13.3	88.2
Turkmenistan	3.3	1.6	2.6	1.6	2.6	1.6	1.0	2.6	1.0	6.2	4.8	1.9	4.8	1.9	1.0	2.9	1.1	8.8	9.6	3.3	9.6	3.3	1.6	4.8	2.9	17.3
Tuvalu	1.3	1.6	1.0	3.9	1.0	3.9	1.0	4.9	1.0	6.9	1.0	4.5	1.0	4.5	1.0	5.5	1.0	7.5	1.0	7.7	1.0	7.7	1.0	8.7	1.0	10.7
Uganda	3.2	1.6	2.6	4.0	2.6	4.0	1.5	5.5	1.0	9.0	4.8	4.7	4.8	4.7	1.9	6.6	1.0	12.3	9.4	7.9	9.4	7.9	4.3	12.3	2.2	23.9
Ukraine	24.0	1.6	22.3	2.0	22.3	2.0	1.8	3.7	1.9	28.0	41.3	2.3	41.3	2.3	2.2	4.5	2.1	48.0	82.0	4.0	82.0	4.0	5.0	9.0	5.5	96.5
United Arab Emirates	1.3	0.0	4.5	0.0	4.5	0.0	0.0	0.0	0.0	4.5	8.2	0.0	8.2	0.0	0.0	0.0	0.0	8.2	16.3	0.0	16.3	0.0	0.0	0.0	0.0	16.3
Uruguay	1.3	1.6	2.4	4.6	2.4	4.6	2.0	6.6	1.1	10.1	4.5	5.4	4.5	5.4	2.5	7.9	1.2	13.6	8.9	9.3	8.9	9.3	5.7	14.9	3.2	27.0
Uzbekistan	10.9	1.6	9.6	2.2	9.6	2.2	1.2	3.4	1.3	14.2	17.7	2.6	17.7	2.6	1.5	4.1	1.4	23.2	35.1	4.4	35.1	4.4	3.4	7.8	3.7	46.7
Vanuatu	1.3	1.6	1.0	6.3	1.0	6.3	1.0	7.3	1.0	9.3	1.0	7.4	1.0	7.4	1.0	8.4	1.0	10.4	1.0	12.5	1.0	12.5	1.9	14.5	1.0	16.5
Venezuela	10.4	1.6	9.2	8.7	9.2	8.7	1.8	10.5	2.5	22.2	17.0	10.3	17.0	10.3	2.3	12.5	2.7	32.3	33.8	17.5	33.8	17.5	5.2	22.7	7.2	63.7
Viet Nam	8.6	1.6	6.6	15.8	6.6	15.8	2.4	18.2	1.3	26.1	12.3	18.6	12.3	18.6	3.0	21.6	1.4	35.3	24.4	31.6	24.4	31.6	6.8	38.4	3.7	66.5
Yemen	1.3	1.6	1.6	5.9	1.6	5.9	1.5	7.4	1.0	10.1	3.0	7.0	3.0	7.0	1.9	8.9	1.0	12.9	5.9	11.9	5.9	11.9	4.4	16.2	2.2	24.4
Zambia	1.3	1.6	1.5	1.7	1.5	1.7	1.8	3.5	1.1	6.2	2.8	2.1	2.8	2.1	2.3	4.3	1.3	8.4	5.6	3.5	5.6	3.5	5.2	8.6	3.3	17.5
Zimbabwe	1.3	1.6	1.5	1.8	1.5	1.8	1.7	3.5	1.0	6.1	2.9	2.1	2.9	2.1	2.2	4.3	1.0	8.2	5.7	3.6	5.7	3.6	5.0	8.6	1.7	15.9
Total	924	862	800	800	800	800	240	1,040	272	2,112	1,432	940	1,432	940	292	1,232	292	2,956	2,800	1,600	2,800	1,600	628	2,228	624	5,652

5. APPENDIX 1

GEF PERFORMANCE INDEX – A PROPOSAL TO UPDATE INDICATORS

1. This concept paper lays out the rationale and approach for using selected targets and indicators from the Millennium Development Goal #7 (MDG), along with vulnerability indicators, to build a revised GPI for the GEF's resource allocation model, the STAR. The proposed index would replace the current GPI.

Background

2. The current GEF Performance Index (GPI) is based on the World Bank's Country Policy and Institutional Assessments (CPIA). It does not include a vulnerability factor. The GEF GPI is a simple weighted average of three scaled scores: 1) a GEF project performance score (PPI); 2) a country environmental policy and institutional assessment score (CEPIA) developed from the Bank CPIA; and 3) a broad indicator framework score (BFI) also developed from the CPIA.

3. The CPIA evaluates the quality²⁴ of institutions and policies, and is the main criterion for allocating country-credits from IDA. It consists of 16 indicators covering 4 clusters: a) economic management, b) structural policies, c) policies for social inclusion, and d) public sector management and institutions. Policies and Institutions for Environmental Sustainability fall under cluster C. The ratings undertaken since 1997 are prepared annually in all countries by Bank country teams.

4. Specific criticisms of the CPIA include: lack of clarity and transparency of the different components of the index. In policy circles, doubt has been cast on both the methodology for conducting the assessments and the relevance for aid allocation decisions (Breton Woods Project 2006). A frequent criticism of the CPIA is the discrepancy between the quality of policies and institutions rated by the CPIA, and actual growth of rates of a select number of countries. Comparisons with UNDP's Human Poverty Index (HPI) reveal discrepancies.²⁵ As well, all ratings are qualitative and therefore prone to a degree of subjectivity. Obtaining objective consistency among all Bank teams is difficult.²⁶ In addition, full disclosure of the methodology remains an outstanding issue. In 2004 the Bank agreed to make the detailed scores available for low-income countries and in 2006 scores were made available for all countries.

²⁴ Quality refers to how conducive the policy and institutional framework is to fostering poverty reduction, sustainable growth and the effective use of development resources. "The CPIA is derived from judgments of Bank staff on country performance on a set of macroeconomic, structural, social and governance criteria ... which embody a set of well-known neo-liberal economic norms" (Van Waeyenberge 2008).

²⁵ A number of countries show big discrepancies in scores for the two indicators (using 2005 as the year of comparison) – Benin, Eritrea, Nigeria, Togo, Sudan, Senegal, Burkina Faso, Tanzania, Mali, Lesotho, Mozambique.

²⁶ OECD and the Bretton Woods project (2006) conclude "i) the likelihood of correlation of errors among the 37 sources from which the composite indicators are constructed, which limits the statistical legitimacy of using them to compare country scores; ii) their lack of comparability over time; sample bias; and iv) insufficient transparency."

5. The Broad Framework Indicator (BFI) and the Country Environmental Policy and Institutional Assessment Indicator (CEPIA), individual components of the CPIA, are subject to World Bank disclosure policies and as such, the actual methods and components used to derive these indicators are not publically available.

6. The Mid Term Review of the RAF (EO power point, Dec 2007) highlights that the GEF resource allocation process should give greater weight to the environmental portfolio performance, and Council has commented, on several occasions, upon the need to develop a revised GPI. The GEFSEC has put forth a proposal for a new GPI indicator for inclusion in the STAR, taking into consideration the above criticisms of the CPIA, in particular the lack of transparency, the EO recommendation, and the consideration of vulnerability. A review of a number of indexes in use, including the Human Development Index, the Environmental Sustainability Index, and the Environmental Performance Index found that these indexes were not sufficiently robust for a resource allocation model from a transparency perspective and from considerations of data quality.

7. The proposed new GPI indicator would be comprised of two indexes:

the Environmental Performance Index (EPI) and the Environmental Vulnerability Index EVI. Thus,

$$\mathbf{EPI +EVI =GPI}$$

1. EPI - Using Millennium Development Goal 7 (MDG 7) Targets as an Environmental Performance Index

8. The GEF proposes to use the Millennium Development Goal #7 targets and indicators as the basis for the new GPI. Since Governments of developing countries, the international community, private sector, and civil society all support the framework provided by the Millennium Declaration, there is wide acceptance of the MDG's intent and targets. Countries are now more than halfway towards the target date – 2015 for achieving the MDGs- and have developed processes and practices to capture the data accurately.

9. An environmental performance index based on progress towards achieving the MDGs would be a proxy for national commitment and capacity to improve environmental management. As the index is constructed using specific targets/outcomes with a baseline of 1990, national institutional effectiveness is implied.

10. Benefits of using the MDG 7 *Ensure Environmental Sustainability* as a basis for the EPI include:

- The eight MDGs have been adopted as a framework for development activities by over 190 countries in 10 regions.
- Countries are fully involved in the tracking of the MDGs and a transparent global data base exists on-line that can be accessed by the public.
- Data points exist for a baseline and periodic updates for over 210 countries. The data base will continue to be updated on a periodic basis.

- Quality of data is monitored by technical agencies and the UN MDG data base provides a consistency for all proposed indicators.
- A small set of indicators capture country commitment and progress to reverse environmental loss and ensure environmental sustainability. Thus the proposed index uses a small number of representative indicators.

11. Specifically MDG 7 sets out to reverse the loss of environmental resources including forests, biodiversity, and the ozone layer, while increasing access to adequate water and sanitation. Three MDG 7 targets capture the progress relevant to securing global environmental benefits and the mandate of the GEF:

- 1) **7a: *Integrate the principles of sustainable development into country policies and Programs and reverse the loss of environmental resources***
Indicator 7.1: Proportion of land area covered by forest
Indicator 7.2: proxy for GHG intensity of economy- tco2/mil including land use change
- 2) **7b: *Reduce Biodiversity Loss, achieving by 2010 a significant reduction in the rate of loss***
Indicator 7.6: Proportion of terrestrial and marine areas protected
- 3) **7c: *Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation***
Indicator 7.8: Proportion of population using an improved drinking water source.
Indicator 7.9: Proportion of population using an improved sanitation facility

12. The progress of countries towards the MDG targets is a proxy for performance and commitment to reversing environmental loss. In determining performance and the progress towards meeting these MDG target indicators, it is assumed that progress towards each target is linear. Progress would be measured from 1990 to 2007, or the latest year for which data are available in terms of percent change.

13. The year 1990, which is the baseline year, and the latest available data point (2005 to 2008 depending on the country) would be used as point to percent change as a proxy for progress towards achievement of the target. Each indicator would be given equal weight.

2. EVI - Environmental Vulnerability Index

14. Whereas the GBI captures the natural resource status and the GPI performance, there is no indicator to capture need or capacity to address threats. A consideration of vulnerability could address this gap by considering exposure to hazards and capacity to mitigate or cope with negative impacts.

15. For the purposes of the GEF EVI, vulnerability is defined as: Country vulnerability (V) to environmental degradation and climate change, including variability. Vulnerability is a function of a country's exposure to a hazard and its capacity to mitigate and cope with the impact of the hazard. A hazard is (H) – the probability of the incidence of a harmful event at a specific site during a given period. Risk (R) or the probability of environmental degradation and climate change, including variability, negatively impacting a country would also be factored into the index.

Risk = (hazard, vulnerability)

Vulnerability= (exposure to hazards, capacity to cope with risks)

Hazard= (probability, hazard, coverage)

16. The environmental vulnerability index would be constructed around two components:
 - Country Response Capacity – Gross National Income (GNI) per capita with consideration of classification as a Low Income Food Deficit Country (LFIDC) and based on FAO and World Bank data; under five child mortality as a proxy for level of child health and overall development in a country, based on WHO data.
 - Hazard occurrence - Number of natural hazards and percentage of population affected based on OFDA-CRED yearly data, with consideration of Small Island Developing State status (SIDs).
17. The EVI index would be constructed using equal weights within each component and among the two components.
18. The EVI would form part of the EPI score and be weighted equally with the other EPI indicators.
19. The EPI would then be combined with the GBI to arrive at a STAR allocation score.

Star Score = GBI * GPI (EPI +EVI)

Rationale and method of computation

Goal 7: Ensure Environmental Sustainability

Target 7. A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Indicator 7.1: Proportion of land area covered by forest

The indicator is defined as the proportion of forest area to total land area and expressed as a percentage.

20. Since 1990 the world has lost about 1.3 million square kilometers of forest, almost 100,000 square kilometers each year. The losses have been greatest in the great tropical forests of Sub-Saharan Africa and Latin America and the Caribbean. Forest products, including timber, are important sources of livelihood for people in developing countries, and forests provide habitat for many plant and animal species. To ensure sustainable development, forests must be managed wisely to continue to benefit future generations.

21. Forest is defined in the Food and Agriculture Organization's (FAO) Global Forest Resources Assessment as land spanning more than 0.5 hectares with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.

Method of Computation:

22. The area of forest for three points in time (1990, 2000 and 2005) is used to establish estimation of trends over time. The proportion of forest area of total land area is calculated and changes in the proportion are computed to identify trends.

Indicator 7. CO₂ emissions - Carbon Intensity

23. Carbon dioxide, which is produced by burning fossil fuels and manufacturing cement, is a greenhouse gas that contributes to global climate change. Emissions rose by billion metric tons between 1990 and 2002.

To measure a country's efforts in the climate change area, we will factor in rate of change in **carbon intensity**, looking at data from 1990 and 2005. Carbon intensity measures the tons of carbon equivalent emitted by a country per unit of economic activity (GDP). There are two reasons for using change in carbon intensity: 1) Reducing emissions will be more feasible in countries that have already demonstrated willingness and/or ability to reduce carbon intensity, 2) Rewards countries that have reduced their carbon intensity levels.

24. GHG intensity of the economy is a measure of greenhouse gas emissions per unit of economic output. GHG emissions are measured as CO₂ only, or CO₂ and additional greenhouse gases (depending upon the availability of non-CO₂ data in CAIT.) Economic output is expressed as gross domestic product (GDP).

Method of Computation:

25. CO₂ intensity of the economy is a function of two variables. The first variable is energy intensity, or the amount of energy consumed per unit of GDP. This reflects both a country's level of energy efficiency and its overall economic structure, including the carbon content of goods imported and exported. An economy dominated by heavy industrial production, for instance, is more likely to have higher energy intensity than one where the service sector is dominant, even if the energy efficiencies within the two countries are identical. Likewise, a country that relies on trade to acquire (import) carbon-intensive goods will—when all other factors are equal—have a lower energy intensity than those countries that manufacture those same goods for export.

26. The second component of emissions intensity is fuel mix or, more specifically, the carbon content of the energy consumed in a country, which is also included in CAIT (see below, Section 2.4.ii). The product of energy intensity (E/GDP) and fuel mix (CO₂/E) is equal to CO₂ intensity (CO₂/GDP).

(<http://cait.wri.org>)

Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

Indicator: 7.6 Proportion of terrestrial and marine areas protected

27. The indicator is expressed as percentage protected of the total territorial area of a country.

28. According to the International Union for Conservation of Nature (IUCN), a protected area is “an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and

of natural and associated cultural resources, and managed through legal or other effective means.” Marine Protected Areas (MPA) are defined as “as any area of intertidal or subtidal terrain, together with their overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.”

29. Only protected areas that are “nationally designated” are included in this indicator. The status “designated” is attributed to a protected area: when the authority that corresponds, according to national legislation or common practice (e.g. by means of an executive decree or the like), officially endorses a document of designation. The designation must be for conservation of biodiversity, not single species and not fortuitous de facto protection arising because of some other activity (e.g. military). Hence, a number of United States Marine Managed Areas and permanent fisheries closures are excluded.

Method of Computation:

30. The total protected area extent by country/territory is divided by total territorial area of the country/territory (includes total land area, inland waters, and territorial waters up to 12 nautical miles.) Protected areas increase with time and are not deleted from subsequent years.

Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

31. **Water and sanitation are basic services needed by all.** Yet in Sub-Saharan Africa 300 million people lack access to improved water sources and 450 million lack adequate sanitation services. South Asia has made excellent progress in providing water, but progress has been slower in providing sanitation. In East Asia rapid urbanization is posing a challenge for the provision of water and other public utilities. Latin America and the Caribbean, the most urban developing region, has made slow progress in providing sanitation services. Many countries in Europe and Central Asia lack reliable benchmarks for the early 1990s. In the Middle East and North Africa, Egypt, Tunisia, and Morocco have made the fastest progress.

Indicator: 7.8 Proportion of population using an improved drinking water source

32. The proportion of the population using an improved drinking water source, total, urban, and rural, is the percentage of the population who use any of the following types of water supply for drinking: piped water into dwelling, plot or yard; public tap/standpipe; borehole/tube well; protected dug well; protected spring; rainwater collection and bottled water (if a secondary available source is also improved.) It does not include unprotected well, unprotected spring, water provided by carts with small tanks/drums, tanker truck-provided water, and bottled water (if secondary source is not an improved source) or surface water taken directly from rivers, ponds, streams, lakes, dams, or irrigation channels.

Method of Computation:

33. The indicator is computed as the ratio of the number of people who use an improved drinking water source to the total population, expressed as a percentage.

Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicator: 7.9 Proportion of population using an improved sanitation facility

34. The proportion of the population using an improved sanitation facility, total, urban, rural, is the percentage of the population with access to facilities that hygienically separate human excreta from human contact. Improved facilities include flush/pour flush toilets or latrines connected to a sewer, -septic tank, or -pit, ventilated improved pit latrines, pit latrines with a slab or platform of any material which covers the pit entirely, except for the drop hole and composting toilets/latrines. Unimproved facilities include public or shared facilities of an otherwise acceptable type, flush/pour-flush toilets or latrines which discharge directly into an open sewer or ditch, pit latrines without a slab, bucket latrines, hanging toilets or latrines which directly discharge in water bodies or in the open and the practice of open defecation in the bush, field or bodies or water.

Method of Computation:

35. The indicator is computed as the ratio of the number of people using improved sanitation facilities, to the total population, expressed as a percentage. The same method applies to the rural and urban estimates.