



# Global Environment Facility

GEF/C.25/Inf.10

May 31, 2005

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GEF Council  
June 3-8, 2005

## GEF Resource Allocation Framework Technical Notes and Clarifications

1. Following the endorsement of the Policy Recommendations of the Third Replenishment in October 2002, the GEF Council has been working on the development of a Resource Allocation Framework (RAF). The Council has discussed the RAF at meetings in 2003 and 2004, and at consultations held in September 2004 and March 2005. Council document GEF/C.24/8 discussed by Council in November 2004 contains detailed descriptions of a phased approach to a Resource Allocation Framework for the GEF. During Council consultations in March 2005, Council Members asked for further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June 2005 Council Meeting. The Secretariat has sent to Council members during April and May a set of six notes highlighting specific issues of interest regarding the RAF.

2. These notes addressed the following issues:

- (a) Equations and Weights;
- (b) Public Disclosure of Indicators;
- (c) Thresholds;
- (d) Assessment of Climate Change Benefits;
- (e) Assessment of Biodiversity Benefits; and
- (f) Operationalization.

3. This information document is a compilation of the original technical notes as disseminated to the Council with the exception of the second note on public disclosure. The note on public disclosure has been amended to reflect recent developments on the World Bank management's feedback regarding the use and disclosure of CPIA derived indicators in the RAF. This amended note is consistent with the GEF/C.25/8/Add.1/Rev.1, which will be discussed by Council in this meeting.

## ANNEX 1: EQUATIONS AND WEIGHTS

### GEF RESOURCE ALLOCATION FRAMEWORK:

#### EQUATIONS AND WEIGHTS

##### Background

1. The GEF Council has discussed various documents related to the Resource Allocation Framework (RAF) beginning in 2003. The Council is considering a number of motions related to the RAF that were tabled at its meeting in November 2004. During consultations on the RAF held in Paris in March 2005, several council members sought further clarification on a series of technical issues related to the RAF to facilitate their internal consultations prior to the June Council Meeting. This is the first note in the series. It focuses on equations and weights used in the Resource Allocation Framework.<sup>1</sup>

2. Throughout its deliberations, the Council has consistently agreed on the use of the following two assessments as a basis for the Resource Allocation Framework: (i) GEF Benefits Index (GBI) – separately measured for the biodiversity and climate change focal areas; and (ii) GEF Performance Index (GPI). Council members have asked further clarification on the three sets of weights used in the resource allocation framework:

- (a) Weights on GBI and GPI to determine the allocation score relevant in the Country and Group Allocation model;
- (b) Weights for the performance sub-indices used to compute GPI; and
- (c) Weights for the benefits sub-indices used to determine GBI.

3. This paper focuses on the first two sets of weights while the last one is covered in forthcoming papers focusing on the focal area specific GBI.

##### Weights for GBI and GPI for Determining Allocation Scores

4. In the Country and Group allocation Model, allocations to countries or groups of countries are proportional to their respective allocation scores. In the RAF document discussed

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<sup>1</sup> Glossary of terms

<b>GBI:</b>	GEF Benefits Index for a country, assessed separately for the biodiversity and climate change focal areas.
<b>GPI:</b>	GEF Performance Index for a country, constructed from EEI and PPI:
<b>EEI:</b>	Enabling Environment Index
<b>PPI:</b>	Portfolio Performance Index

at the November 2004 Council meeting (GEF/C.24/8) country allocation scores are determined based on the following equation.

$$\text{Country Allocation Score} = \text{GBI}^{0.8} \times \text{GPI}^{1.0}$$

5. Countries receive country-specific allocations if their allocations are higher than a threshold amount (see forthcoming paper on thresholds). Countries with country-specific allocations below the threshold are assigned to a group of countries. The group allocation is the sum of the individual country allocations of countries belonging to that group.

6. The weights of 0.8 for GBI and 1.0 for GPI proposed in the paper were determined based on replicating historical allocations to countries.

### **Weights used to compute the GEF Performance Index (GPI)**

7. There is still significant debate among Council members about the indicators that are relevant in computing the GEF Performance Index (GPI). During the Council Consultations held in Paris in March 2005, participants reviewed a proposed set of indicators for determining the GPI (as shown in Table 1). It consists of indicators in assessing a country's past portfolio performance (indicators 12 and 13) and an assessment of a country's policies and institutions. The latter consists of indicators directly relevant to the environment sector (indicators 1 through 8) and those that assessed broad framework of policies and institutions in a country (indicators 9 through 11). While Council Members have consistently agreed on the need to use the portfolio assessment and assessment of policies and institutions directly relevant to the environment sector in their deliberations, there has been a significant discussion on the specific indicators of a country's broad framework of policies and institutions that are relevant and important for the GEF Performance Index.<sup>2</sup>

8. Cognizant of this Council discussion, a set of weights for the indicators used to construct the GEF Performance Index is proposed in Table 1 based on the following considerations. The GEF Performance Index will guide future decisions on GEF projects; as such, it should provide greater weight to factors relevant to future projects. Indicators in the Portfolio performance Index reflect the relative success of GEF projects in the past. Past performance while providing a good basis for forecasting future performance is not as strong an indicator as a country's current policies and institutions. Given this understanding, portfolio performance is included in GPI with a proposed weight of 20% while current policies and institutions are included with a

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<sup>2</sup> The following are some of the alternative indicators (instead of indicators 9 through 11 in table 1) for assessing a country's overall policies and institutions that Council members have suggested.

Use the indicators 9, 10, and 11;

Use some of the indicators from 9, 10, and 11;

In addition to indicators 9,10, and 11, use the 2 remaining indicators for "Public Sector Management & Institutions" in CPIA

- Property Rights and Rule-based Governance
- Efficiency of Resource Mobilization

Use the aggregate CPIA rating instead of indicators 9, 10, and 11.

weight of 80%. These weights are consistent with the portfolio performance weights used in the resource allocation frameworks in place at other international financial institutions.

9. Given the consensus in the Council on the relevance and importance of environment sector specific policy and institutions and the ongoing discussions on the content, relevance and importance of broad framework indicators of policies and institutions, 60% of the weight is proposed for the Environment specific indicators, and subject to agreement on their inclusion in some form, 20% for the broad framework indicators.

10. Among the environment sector-specific indicators, indicators 1 through 4 cover broad aspects of the environment, while 5 through 8 assess specific sub-sectors of the environment. The first four indicators should be weighed higher to reflect their wider applicability to all areas of the environment. The distribution of the weights across the indicators of broad framework can be done as appropriate once Council has determined the relevance and importance of each of these indicators.

**Table 1. Indicators proposed to construct the GEF Performance Index\***

<b>Indicator</b>	<b>Proposed Weight (%)</b>
<b>Environmental Environment Index (EEI)</b>	
<i>Indicators of Environment Sector specific Policies &amp; Institutions</i>	
1. Adequacy of Environmental Prioritization	10
2. Cross-sectoral Coordination for Environmental Management	10
3. Quality and Effectiveness of Environmental Assessment System	10
4. Environmental Public Information and Participation	10
5. Policy, Implementation, and Enforcement: Ecosystem and biodiversity Management	5
6. Policy, Implementation, and Enforcement: Freshwater Resources	5
7. Policy, Implementation, and Enforcement Marine & Coastal Resources	5
8. Policy, Implementation, and Enforcement: Air Pollution	5
<i>Subtotal</i>	<i>60</i>
<i>Indicators of Broad Framework of Governance, Policies and Institutions</i>	
9. Quality of Public Administration	
10. Quality of Budgetary and Financial Management	
11. Transparency, Accountability, and Corruption in Public Sector	
<i>Subtotal</i>	<i>20</i>
<b>Portfolio Performance Index (PPI)</b>	
12. GEF PIR ratings of portfolio	10
13. World Bank OED ratings of Environment related projects	10
<i>Subtotal</i>	<i>20</i>
<b>TOTAL</b>	<b>100</b>

\* The 11 indicators used to determine a country's Enabling Environment Index, is derived from the World Bank's CPIA which consist of an assessment of a country's policies and institutions in 16 areas. These include an assessment of Policies and Institutions for Environmental Sustainability and 5 additional areas under "Public Sector Management" in public is one of these 16 areas. Indicators 9 through 11 above of the GEF EEI index above are 3 of the 16 areas under "Public Sector Management". Indicators 1 through 8 are derived from components of the assessment of Policies and Institutions for Environmental Sustainability. The World Bank constructs this index based on an assessment of 10 specific aspects of the environment sector. Eight of these indicators that are relevant for the GEF are used as indicators 1 through 8 above.

## ANNEX 2: PUBLIC DISCLOSURE OF INDICATORS - REVISED

### GEF RESOURCE ALLOCATION FRAMEWORK

#### PUBLIC DISCLOSURE OF INDICATORS

##### Background

1. The GEF Council has discussed various documents related to the Resource Allocation Framework beginning in 2003. The Council is considering a number of motions related to the RAF that were tabled at its meeting in November 2004. During Council consultations held in Paris in March 2005, council members sought further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June Council Meeting. This is a revised version of the second note in the series reflecting recent feedback from the World Bank management on the use and disclosure of CPIA derived indicators by the GEF. It focuses on the issue of public disclosure of the indicators used in the GEF Resource Allocation Framework.<sup>3</sup>
2. Throughout its deliberations, the Council has consistently agreed on the need for public disclosure of the GEF Resource Allocation Framework to increase the transparency of the system.

##### Public Disclosure

3. The GEF will publicly disclose all of the data and indicators used in the Resource Allocation Framework, subject to the public disclosure provisions imposed on the GEF when the data is borrowed from external sources. While indicators used to determine the GEF Benefits Index (GBI) are primarily in the public domain, the same is not true about indicators used to determine the GEF Performance Index (GPI).
4. Most of the indicators proposed for constructing the GPI in GEF/C.24/8 are borrowed from the World Bank's Country Policy and Institutional Assessment (CPIA) indicators used for allocating IDA resources. World Bank management has indicated that CPIA data for IDA countries will be fully in the public domain by 2006 and can be used by the GEF with full public disclosure. However, CPIA data for IBRD countries cannot be disclosed and further, that a GEF Performance Index for IBRD countries which makes use of that data cannot be publicly disclosed.

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<sup>3</sup> **Glossary of terms**

**GBI:** GEF Benefits Index for a country, assessed separately for the biodiversity and climate change focal areas.

**GPI:** GEF Performance Index for a country, constructed from EEI and PPI

**EEI:** Enabling Environment Index

**PPI:** Portfolio Performance Index

5. In light of the above, GEF/C.25/8/Add.1/Rev.1, *GEF Resource Allocation Framework Addendum*, sets out for the Council's consideration options as to the data and indicators that may be employed to measure performance in a GEF RAF and their implications for public disclosure.

6. The first option uses the World Bank's CPIA indicators as proposed in GEF/C.24/8 to construct the GPI, but only discloses the performance indicators and the GPI index for IDA countries. The GPI, including the indicators used to construct GPI, would not be disclosed for IBRD countries.

7. Should this revised option not be acceptable to the Council, four additional options that use other publicly available indicators instead of the World Bank's CPIA indicators are also presented. Under these options, the GPI would be constructed from a combination of governance indicators developed by the World Bank Institute and a new index on environmental sector policies and institutions to be developed by the GEF, in addition to the two project portfolio indices described in GEF/C.24/8 (the GEF portfolio and the World Bank OED environmental portfolio). Since all of the proposed indicators would be in the public domain, all four options would allow for full public disclosure of the GPI, and its component indicators, for all countries.

8. Based on Council decisions on the indicators for constructing GPI, the following public disclosure policies result:

***Items for Full Public Disclosure***

(a) The methodology used in determining:

- (i) The GEF Benefits Index (GBI); and
- (ii) The GEF Performance Index (GPI).

(b) Country Allocation Scores in the Country And Group Allocation Model;

(c) Country and Group Allocations in the Country And Group Allocation Model; and

(d) The indicators:

- (i) GEF Benefits Index (GBI);
- (ii) GEF Performance Index (GPI) for IDA countries only, if using CPIA data; and
- (iii) GEF Performance Index (GPI) for all countries if non CPIA data are used.

***Items to be disclosed to respective countries only***

Indicators used to determine GPI as permitted by the World Bank.

## ANNEX 3: THRESHOLDS

### GEF RESOURCE ALLOCATION FRAMEWORK:

#### THRESHOLD FOR INDIVIDUAL COUNTRY ALLOCATIONS

##### Background

1. The GEF Council has discussed various documents related to the Resource Allocation Framework beginning in 2003. The Council is considering a number of motions related to the RAF that were tabled at its meeting in November 2004. During Council consultations held in Paris in March 2005, council members sought further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June 2005 Council Meeting. This is the third note in the series. It focuses on the threshold allocation that is used in the Country and Group Allocation Phase to determine whether: (i) a country receives allocations specific to the country; or (ii) a country is part of a group of countries that collectively receives allocations.

2. The threshold amount balances the increased certainty that country-specific allocations provide with the operational flexibility that group allocations provide. In the Country and Group Allocation Phase, indicative country allocations are determined in proportion to each country's allocation score, subject to an allocation ceiling and floor.<sup>4</sup> Countries with indicative country allocations higher than a threshold amount can individually access their respective indicative allocations. Such allocations provide countries with the certainty necessary for developing a program for engagement with the GEF. The continuous distribution of allocations scores results in a large number of countries with indicative allocations at or close to the floor, and leads to operational challenges in developing numerous technically viable small projects. Pooling the indicative allocations of countries below the threshold amount into groups and enabling collective access to the pooled resources by members of the groups increases the operational flexibility of the system.

3. In document GEF/C.24/8 considered by the Council at its November 2004 meeting, 48% of Biodiversity resources and 62% of Climate Change resources were allocated to specific individual countries based on the proposed threshold amount of \$10 million. One of the motions tabled in the November 2004 Council meeting proposed that 75% of the resources in each focal area be allocated to individual countries. This paper discusses the relationship between threshold amounts and the share of resources allocated to specific countries and to groups of countries.

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<sup>4</sup> In the Country and Group Allocation Phase, each country's allocation scores are separately determined for the two focal areas: Biodiversity and Climate Change. These scores are determined using an equation that weights two factors: an assessment of the country's potential global environmental benefits in the respective focal area and an assessment of country performance. Additional details are contained in the other technical notes in this series entitled: (i) Equations and Weights; (ii) GEF Benefits Index: Climate Change (forthcoming); and (iii) GEF Benefits Index: Biodiversity (forthcoming).

## Threshold Amount

4. The relationship between threshold amounts and the share of resources allocated to specific individual countries primarily depends on the distribution of country allocation scores. The GEF Benefits Index for both Climate Change and Biodiversity used to determine indicative allocation scores for countries has been revised since November 2004 to reflect some of the concerns raised by Council members. (See the forthcoming notes in this series on these updates for additional details). While the distribution of the new allocation scores are similar to that described in GEF/C.24/8 for Climate Change, the same is not true for the Biodiversity focal area. This note is based on the updated GEF Benefits Index for Climate Change and Biodiversity. The GEF Performance Index has not been updated and remains the same as in Council document GEF/C.24/8.

5. Table 1 shows the number of countries that exceed the threshold amount and the share of resources that these countries account for in the Biodiversity and Climate Change focal areas at two different threshold amounts: the \$10 million threshold amount used in the GEF/C.24/8 and a lower threshold amount of \$6 million. While 19 countries accounting for 63% of the resources exceed the threshold amount of \$10 million used in the GEF/C.24/8 in the Climate Change focal area, 20 countries accounting for 58% of the resources exceed the same threshold for Biodiversity. The update to the Benefits index does not change the share of resources allocated to individual countries for Climate Change, but does make a significant difference for the Biodiversity focal area. If the threshold were lowered to \$6 million, 32 countries accounting for 75% of resources in Climate Change and 34 countries accounting for 70% of resources in Biodiversity would receive separate individual allocations.

**Table 1: Number of Countries with Individual Allocations and the Share of Resources Accounted to them at different Threshold Amounts**

Threshold Amount	No of Countries with Individual Allocations		Share of Resources Accounted by Countries with Individual Allocations	
	Biodiversity	Climate Change	Biodiversity	Climate Change
\$10 million	20	19	58%	63%
\$6 million	34	32	70%	75%

6. Changes in the threshold amount also affect the number of viable groups that can be formed. GEF/C.24/8 discussed by the Council in November 2004 proposed four groups below the threshold of \$10 million.<sup>5</sup> If the threshold is changed, the viability of the groups in terms of the number of countries and the total group allocations will have to be reconsidered (see the forthcoming technical note in this series on Operationalization).

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<sup>5</sup> GEF/C.24/8 proposed three country groups in addition a fourth set of countries with allocations at the floor amount.

7. A number of other factors that alter the distribution of indicative allocations also affect the relationship between the threshold amount and the share of resources allocated to countries that exceed the threshold amount. The most important of these is the size of the GEF4 replenishment.<sup>6</sup> The simulations presented in Table 1 are based on the resources that would have been available if the RAF had been in place for GEF3, where the total replenishment was for \$3 billion of which \$820 million each would be available for allocation to countries and groups of countries under the RAF for the Biodiversity and Climate Change focal areas.

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<sup>6</sup> The floors and ceilings used can also affect the share of resources allocated to individual countries. However, these effects are much smaller than the impact of size of the replenishment.

## **ANNEX 4: ASSESSMENT OF CLIMATE CHANGE BENEFITS**

### **GEF RESOURCE ALLOCATION FRAMEWORK:**

#### **GEF BENEFITS INDEX FOR CLIMATE CHANGE (GBI<sub>CC</sub>)**

##### **Background**

1. The GEF Council has discussed various documents related to the Resource Allocation Framework beginning in 2003. The Council is considering a number of motions related to the RAF that were tabled at its meeting in November 2004. During Council consultations held in Paris in March 2005, council members sought further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June 2005 Council Meeting. This is the fourth note in the series and includes a discussion of the GEF Benefits Index for Climate Change.
2. The GEF Benefits Index for Climate Change (GBI<sub>CC</sub>) provides a relative ranking of countries for meeting the Climate Change objectives of the GEF under the Resource Allocation Framework. Actual allocations to countries will also depend on the total resources available for Climate Change, the performance assessment of countries and Council decisions on the specific modalities and rules for the Resource Allocation Framework.

##### **GEF Benefits Index for Climate Change: Context**

3. The United Nations Framework Convention on Climate Change (UNFCCC), which became effective in March 1994, is an international acknowledgment that changes in the Earth's climate and its adverse effects are a common concern of mankind and calls for the widest possible cooperation by all countries. The UNFCCC seeks to stabilize atmospheric greenhouse gas concentrations at levels that would prevent dangerous anthropogenic interference with the global climate system. The Convention calls upon all countries to take actions to stabilize the climate in keeping with the principle of "common but differentiated responsibilities". The GEF operates as financial mechanism to the UNFCCC and provides new and additional grant and concessional funding to developing countries and countries with economies in transition to achieve global environmental benefits in climate change.
4. As the financing mechanism of the UNFCCC, the GEF has also supported the national communications of developing countries to the UNFCCC. The GEF operational strategy for climate change placed initial emphasis on four Operational Programs that address long-term program priorities to mitigate climate change: the removal of barriers to energy conservation and energy efficiency; the promotion of renewable energy; the reduction of costs for low GHG technology; and promotion of sustainable transport. The GEF has supported limited activities to

sequester carbon, but the goal of sequestering terrestrial carbon is largely a secondary benefit of projects in the biodiversity or land degradation focal areas.<sup>7</sup>

5. The initial guidance to the GEF on adaptation stipulated that GEF should support Stage I and Stage II adaptation activities in the context of national communications. More recently, the GEF has responded to Guidance from COP7 and COP10 by operationalizing the Strategic Pilot on Adaptation (SPA), intended to provide support for adaptation activities in the various focal areas in which GEF works. In addition, the GEF operates the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF), both of which support projects designed to meet countries adaptation needs. In future, the GEF will also operate the Adaptation Fund, to be established with the revenue from CER's from the CDM.

### **GEF Benefits Index for Climate Change**

6. The GEF Benefits Index for Climate Change seeks to determine the potential global benefits that can be realized from climate change mitigation activities in the country. It is constructed from two indicators: (a) Baseline GHG emissions for the year 2000 in tons of carbon equivalent and (b) Carbon Intensity Adjustment Factor computed as the ratio of the carbon intensity in 1990 to the carbon intensity in 2000. This index updates the Benefits index previously proposed in GEF/c.24/8 based on Council discussions at its November 2004 meeting.

$$GBI_{CC} = \text{Baseline GHG Emissions} \times \frac{\text{Carbon Intensity}_{1990}}{\text{Carbon Intensity}_{2000}}$$

7. Baseline GHG emission levels provides a broad measure of the scale of the mitigation potential of a country, while avoiding perverse incentives that results from using current level emissions. To ensure widest coverage among countries, the year 2000 is used as the base year. Including Baseline GHG emission levels in the GBI results in a larger GEF Benefit Index for larger emitters. There are two reasons for using GHG emission levels. First, in general, countries with larger emissions have lower abatement costs, which increase less rapidly with abatement than those in countries with smaller emissions. Second, projects are likely to have greater demonstration and learning effects in high emitting countries than in countries with smaller levels of emissions.

8. The carbon intensity of a country measures the tons of carbon equivalent emitted by a country per unit of economic activity (GDP). It changes over time because of (a) increased carbon efficiency brought about by changes in fuels or technology or economic growth and (b) structural shifts in the economy away from carbon intensive activities. There are two reasons for using change in carbon intensity. First, reducing emissions will be less costly in countries that

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<sup>7</sup> GHG emissions from land use are less certain than GHG emissions from fossil fuel combustion. The World Resources Institute estimates that land use changes accounts for approximately 30% of total worldwide GHG emissions. See Climate Analysis Indicators Tool of the World Resources Institute. ([cait.wri.org](http://cait.wri.org))

have already demonstrated willingness and/or ability to reduce carbon intensity. Second, it rewards countries that have reduced their carbon intensity levels.

9. National Communications to the UNFCCC provide detailed and accurate GHG emissions inventories. At present, their coverage (over 110 countries) is still too limited to cover all of the countries eligible for GEF support (over 160 countries). In addition, the initial national communications do not all utilize the same base year for the GHG inventory.<sup>8</sup> To ensure both comprehensiveness and comparability, standardized carbon emissions data available from the Climate Analysis Indicators Tool (CAIT) unit of the World Resources Institute are used in the calculation of the GEF Benefits Index.<sup>9</sup> Comparisons of the CAIT data with the corresponding data reported by countries in their national communications to the UNFCCC show a high degree of correlation between the two datasets.

10. In keeping with the current programs and strategies of the GEF, only carbon emissions from fossil fuel combustion and cement and the emission of other GHG gases are included in the baseline GHG emissions. Specifically, GHG emissions associated with land use changes have not been included in the baseline figures. The distribution of Baseline GHG emission levels (year 2000) across eligible GEF recipient countries is shown in Figure 1. Countries have been sorted based on their baseline GHG emission shares and are shown from left to right. For each country, the graph shows the percentage share of total GHG emission among the eligible GEF recipient countries. The distribution is highly skewed with 30 countries accounting for 85% of total GHG emissions, while the remaining 137 countries account for the remaining 15% of total GHG emissions.

11. The distribution of the carbon intensity adjustment factor, measured as the ratio of the carbon intensity in 1990 to that in 2000 is shown in Table 1. The carbon intensity in three-fourths of the countries has decreased during the 90's and increased in the remaining countries. While it has changed by less than 10% for many countries, the changes are quite substantial for a large number of countries. Carbon intensity has decreased by between 10 and 25% in 22 countries and by more than 25% in 40 countries during the 90's. In contrast, the carbon intensity has increased by between 10% and 25% in 11 countries and by more than 25% in 10 countries.

12. The distribution of the GEF Benefits Index for Climate Change, which includes the change in carbon intensity, is also shown in Figure 1. This distribution is quite similar to the distribution of Baseline GHG emissions.

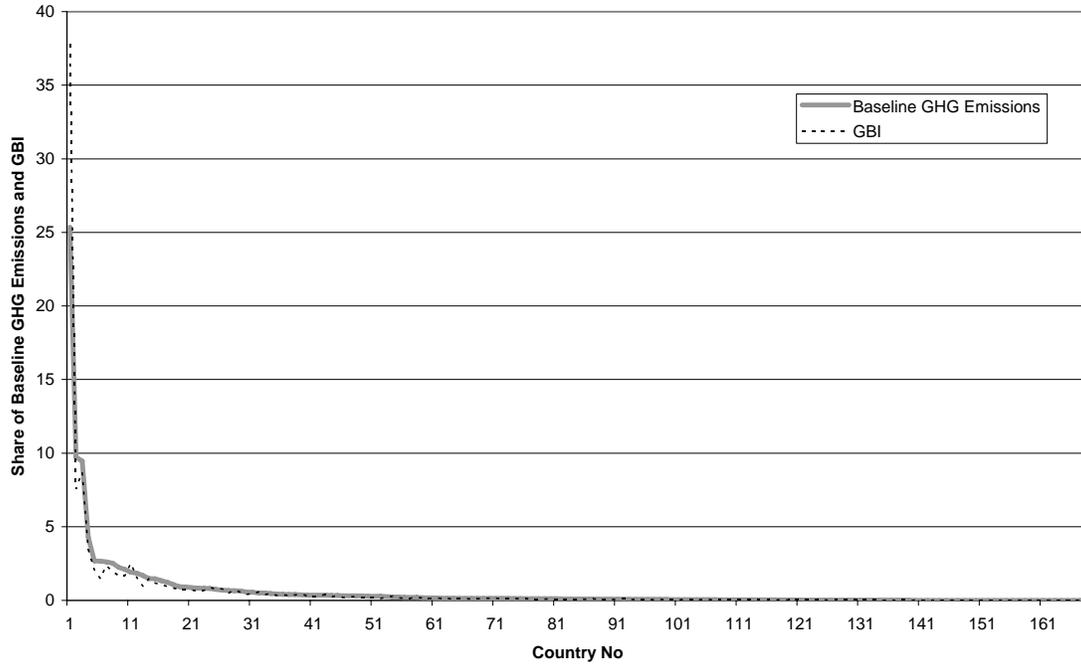
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<sup>8</sup> Only about 100 countries have provided National Communications to the UNFCCC, mostly for the year 1994. In future, information taken from inventories found in national communications may be used to generate the global benefits index for climate change. The Second National Communications should provide a more consistent basis for emissions data than did the first. However, the data from the SNC's will not be available for several years.

<sup>9</sup> Information can be found at the World Resources Institute website at [cait.wri.org](http://cait.wri.org).

**Figure 1:**

**Share of Baseline GHG Emissions and GBI**



**Table 1: Distribution of Carbon Intensity Adjustment Factor**

Carbon Intensity Adjustment Factor	No of Countries
Greater than 2	4
1.25 to 2	36
1.1 to 1.25	22
1.0 to 1.1	40
0.9 to 1.0	18
0.75 to 0.9	12
0.5 to 0.75	9

## **ANNEX 5: ASSESSMENT OF BIODIVERSITY BENEFITS**

### **GEF RESOURCE ALLOCATION FRAMEWORK:**

#### **GEF BENEFITS INDEX FOR BIODIVERSITY (GBI<sub>BIO</sub>)**

##### **Background**

1. The GEF Council has discussed various documents related to the Resource Allocation Framework beginning in 2003. The Council is considering a number of motions related to the RAF that were tabled at its meeting in November 2004. During Council consultations held in Paris in March 2005, Council members sought further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June 2005 Council Meeting. This is the fifth note in the series and includes a discussion of the GEF Benefits Index for Biodiversity.
2. The GEF Benefits Index for Biodiversity (GBI<sub>BIO</sub>) provides a relative ranking of countries for meeting the Biodiversity objectives of the GEF under the Resource Allocation Framework. Actual allocations to countries will also depend on the total resources available for Biodiversity, the performance assessments of countries, and Council decisions on the specific modalities and rules for the Resource Allocation Framework.

##### **GEF Benefits Index for Biodiversity: Context**

3. Reducing the rate of biodiversity loss and conserving existing biodiversity as a basis of sustainable development are major global challenges. As the financial mechanism for the Convention on Biological Diversity (CBD), the GEF's biological diversity objectives derive from those of the CBD. Biological diversity is defined by the CBD in terms of the variability in genes, species, and ecosystems. The CBD's objectives are conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Additionally, the CBD has set out specific targets to be met by 2010 towards achieving these objectives.
4. Consistent with the guidance of the CBD, the GEF has defined strategic priorities for catalyzing sustainability of protected areas, mainstreaming biodiversity conservation in production systems, capacity building for the Cartagena Protocol on Biosafety, and the generation and dissemination of best practices. Recognizing the biological diversity across ecosystems, these priorities are operationalized separately through operational programs for arid and semiarid ecosystems, coastal, freshwater, and marine ecosystems, forest ecosystems, mountain ecosystems and biodiversity important for agriculture.
5. Biodiversity is not equally distributed throughout the world. Rates of biodiversity loss vary across ecosystems, and ecosystems vary in their level of species richness. Neither the economic nor the ecosystemic value of biodiversity resources is well understood. In particular, there is insufficient knowledge of the interdependence of species within ecosystems and the impact of the extinction of one species on others. However, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize the threats of significant reduction or loss of biological diversity.

6. Conserving biological diversity requires achieving a balance between ensuring that resources are allocated primarily to areas of high biodiversity using the best available information, and maintaining large-scale ecological processes and life-support systems at local, regional, and global scales (i.e., ecosystem services), thus recognizing that all biodiversity is important. Sustainable achievement of global biodiversity objectives will greatly depend on the extent to which GEF activities are country-driven; respond to programs of national priority that fulfill the obligations of the Convention; and are related to appropriate national policy frameworks and plans for sectoral, economic, and social development.

### **GEF Benefits Index for Biodiversity**

7. The GEF Benefits Index for Biodiversity is intended to be responsive to its mandate, conceptually simple, scientifically based and comprehensive in its coverage of GEF-eligible countries. Drawing on work by the scientific community and data compiled by various organizations, including the World Wildlife Fund, Conservation International, The World Conservation Union (IUCN), Birdlife International and FishBase, the Secretariat has constructed the GEF Benefits Index for Biodiversity with the support of the World Bank's Development Research Group. The GEF Benefits Index described below makes maximum possible use of the available, scientifically-reliable information for a cross-country assessment of terrestrial and marine biodiversity. The Index has benefited from extensive technical consultations with conservation scientists in NGOs. It updates the GEF Benefits Index previously proposed in GEF/c.24/8 and prior documents on the RAF. It will be further refined and updated as additional reliable data and indicators become available.

8. The GEF Benefits Index described in this note reflects the complex, highly uneven distribution of species and threats to them across the ecosystems of the world, both within and across countries. It recognizes the richness of available data in some areas of biodiversity (e.g., species within certain taxonomic groups) and the sparseness of available data in others (e.g., genetic diversity and ecosystem services). It also acknowledges the gaps in the available data -- for example, information on genetic diversity and ecosystem services at the country level -- through the inclusion of broad indicators that capture the uniqueness of ecoregions within each country. It is aligned with the 2010 targets of the CBD through the incorporation of the following elements:

- (a) Magnitude of taxonomic variability at the species and higher levels, by recognizing species richness with special emphasis on threatened species. As speciation is correlated with genetic diversity, it also recognizes variability at the genetic level.
- (b) Large and unique ecoregions that provide opportunities for expansion in the global network of protected areas, both by area and species representation.
- (c) Explicit inclusion of marine and terrestrial biodiversity, recognizing their distinct contributions to ecosystems in these spheres.
- (d) Recognition that all biodiversity is important, and provision of opportunities for sustainable use and the maintenance of ecosystem services at various scales, by ensuring a minimum level of resources to all countries.

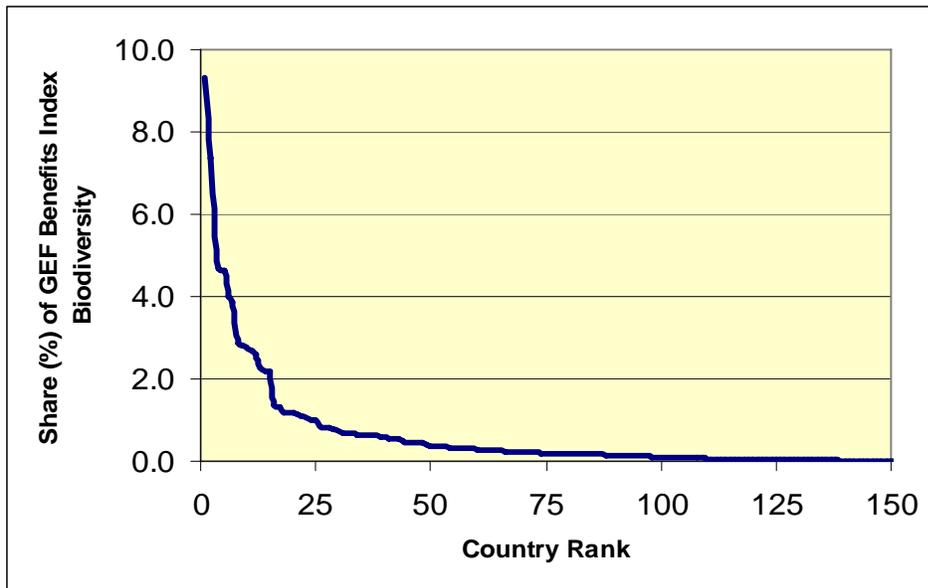
9. Wherever feasible, the GEF Benefits Index for Biodiversity ( $GBI_{BIO}$ ) is developed from subnational data that are based on biological science and not on political boundaries. The bottom-up approach can also provide detailed local information on globally-important biodiversity resources, to help countries formulate their own biodiversity programs.

10. The  $GBI_{BIO}$  for a country is a weighted average of the country's scores for marine biodiversity and terrestrial biodiversity, as detailed in the next two sections. In the base case, the terrestrial score is weighed 70% and the marine score is weighed 30%. The  $GBI_{BIO}$  scores are not evenly distributed across countries. Figure 1 show the share of the total  $GBI_{BIO}$  accounted for by each country eligible for receiving GEF funding for biodiversity projects.<sup>10</sup> Countries with the highest scores are shown in the left while those with the lowest scores are shown in the right. 30 countries account for about 75% of the global biodiversity benefits, while the remaining 124 countries account for 25% of the global biodiversity benefits.

GEF Benefits Index for Biodiversity =  $W_T \times \text{Terrestrial Score} + W_M \times \text{Marine Score}$

With  $W_T=0.7$  and  $W_M=0.3$

Figure 4.1: Distribution of GEF Benefits Index Biodiversity ( $GBI_{BIO}$ )



### Terrestrial Score for each country

11. The Terrestrial score for each country is built up from highly-detailed subnational data available for specific taxonomic groups, but recognizes the paucity of data for other groups and for ecosystems. The score is constructed in four steps, which are described more fully in the following section.

<sup>10</sup> The shares reported here are the shares of the total GEF Benefits Index for Biodiversity ( $GBI_{BIO}$ ) only; they are not the allocation shares in the Country and Group Allocation Phase of the Resource Allocation Framework. The latter are computed after the benefits index shown here are combined with the GEF Performance Index using the equation described in the first technical note in this series.

- (a) Identify all components of distinct terrestrial ecoregions within a country (these Country-Ecoregion Components are abbreviated as CECs);
- (b) Score each CEC using four characteristics – represented species, threatened species, ecoregion representation, and threatened ecoregions;
- (c) Determine the composite score for each terrestrial CEC using a weighted average of the four characteristics scores;
- (d) Compute the score for each country as the sum of scores for all of the CECs in the country.

### **Identify Terrestrial Country-Ecoregion Components**

12. An ecoregion is a relatively large unit of land containing a distinct assemblage of natural communities and species, with boundaries that approximate the original extent of natural communities prior to major land use changes. The World Wildlife Fund (WWF) has recently developed a map of the world that identifies and characterizes 867 terrestrial ecoregions.<sup>11</sup> The map's resolution is high enough to make it suitable for designing networks of conservation areas.<sup>12</sup>

13. Terrestrial ecoregions are defined with respect to original extent of biodiversity, while the focus of the GEF framework is on countries. Terrestrial ecoregion boundaries often overlap national boundaries, which are in most instances unrelated to the geographic distribution of biodiversity. Country Ecoregion Components (CECs) are identified by overlaying the biologically-determined ecoregion map of the world on a politically-determined map of country boundaries. Given the focus on current actions and projects, only areas that remain currently uncleared for agriculture or urban settlement are considered.<sup>13</sup> Within countries, CECs reflect the distributions of local fauna and flora.

14. A CEC is defined as the part of a terrestrial ecoregion within a country's boundaries that currently remains uncleared for agriculture or urban settlement. For instance, an ecoregion that runs across four different countries is divided into four CECs, each containing the part of the ecoregion that currently remains uncleared within the respective country's borders. Making this distinction divides the 867 terrestrial ecoregions into approximately 1,700 CECs. Of these, 1,326 CECs are in GEF-recipient countries and are the focus of analysis for the GEF Resource Allocation Framework.

### **Score Terrestrial Country Ecoregion Components**

15. The second step in computing the terrestrial score of each country is characterizing each CEC with four indicators – represented species, threatened species, represented ecoregions, and threatened ecoregions -- each of which is discussed below.

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<sup>11</sup> WWF has also partially characterized the freshwater and marine ecoregions of the world. These regions can also be incorporated into the GEF Benefits Index in the future when the characterization is globally complete. See [www.nationalgeographic.com/wildworld/terrestrial.html](http://www.nationalgeographic.com/wildworld/terrestrial.html) for additional details.

<sup>12</sup> The average size of an ecoregion in the WWF delineation is about 150,000 km<sup>2</sup>.

<sup>13</sup> High-resolution GIS maps supplied by the International Food Policy Research Institute (IFPRI) are used to identify parts of the original ecoregion that have been cleared.

### Represented Species

16. The represented species score is obtained by averaging scores for all the available taxonomic groups. The current score is based on data for mammals, birds, amphibians, reptiles, freshwater fish, flowering plants and non-flowering plants. Additional taxonomic groups will be added as data become available.

17. This indicator is aggregated from separate analyses of the remaining habitat for each species. Only species that have been evaluated in a manner that is comprehensive and meaningful for cross-country comparisons are included.<sup>14</sup> Each species receives a total credit of 1 globally, which is distributed across CECs in proportion to the remaining habitat for the species. For instance, if 60% of the habitat for a species lies in a particular CEC and the remaining 40% is distributed evenly across two other CECs, the three CECs receive credits of 0.6, 0.2, and 0.2 for that species. All other CECs do not receive any credits for the species. For each CEC, species credits are totaled for each of the taxonomic groups (or taxa) and normalized using the total number of species in the taxa worldwide. The CEC score for represented species is computed as the average of the normalized credits for the seven taxonomic groups for which data is currently available. This approach gives equal representation to the taxa at the world scale.<sup>15</sup>

### Threatened Species

18. Computation of the threatened species score is identical to computation of the represented species score, after one initial adjustment. In this adjustment, species receive credits based on their threat class, rather than uniform credits of 1. The current score is based on threat-class information for mammals, birds and amphibians. Additional taxonomic groups will be added as data become available.

19. The threatened species score recognizes the greater urgency of protecting species that face significant risks of extinction. After evaluating global threats to each existing species, IUCN classifies it into one of six categories: extinct in the wild, critically endangered, endangered, vulnerable, near threatened and least concern. Taking scientifically-estimated extinction probabilities and conservation priorities into account, the six categories are respectively assigned weights of 10, 10, 6.7, 1, 0 and 0.<sup>16</sup>

20. The threatened species credits for each CEC are aggregated separately for mammals, amphibians and birds, and normalized by the total number of threatened species credits in each taxon. The threatened species score averages the normalized credits for the three taxa.

### Represented Ecoregions

21. Each terrestrial CEC represents an ecoregion with unique characteristics from a global perspective. Each ecoregion receives a total credit of 1 globally, which is distributed across the

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<sup>14</sup> IUCN has provided comprehensive range data for mammals, birds and amphibians. More aggregative data on reptiles and plants have been provided by the World Conservation Monitoring Center, while data on marine and freshwater fish have been provided by FishBase.

<sup>15</sup> Aggregating credits at the species level would result in domination of indicators by taxonomic groups with large numbers of species, such as flowering plants. Group averaging more fully recognizes the breadth of biodiversity across taxonomic groups.

<sup>16</sup> The highest weight, 10, is applied to both critically endangered species and species that are extinct in the wild. The latter category is given critical weighting so that conservation priorities will expand the possibility for future re-introduction of the relevant species into their native habitats.

CECs comprising that ecoregion in proportion to the remaining habitat (land that is uncleared for agriculture or urban settlement). This index captures the uniqueness of each CEC as well as its scale. The wide array of factors encompassed in an ecoregion ensures that non-species-related components of biodiversity are reasonably represented in the terrestrial score. This index will be replaced with more precise indicators of genetic diversity, ecosystem services and other components of biodiversity as comprehensive data become available for all GEF-eligible countries.

### Threatened Ecoregions

22. The threatened ecoregion score recognizes the greater urgency of protecting ecoregions that face significant risks of habitat destruction. The World Wildlife Fund classifies all ecoregions into three groups: critical/endangered, vulnerable and stable. Taking scientific estimates of habitat-degradation rates into account, the three categories are respectively assigned threat credits of 4, 2 and 1. The threat credit for each ecoregion is distributed across its constituent CECs in proportion to the remaining habitat. This index captures the scale, uniqueness and threat level of each CEC. Like the represented ecoregion index, it will be replaced by more precise indicators of genetic diversity, ecosystem services and other components of biodiversity as comprehensive data become available for all GEF-eligible countries.

### **Determine Composite Terrestrial Scores for each CEC**

23. The third step in determining a country's terrestrial score is to compute the composite terrestrial score for each CEC. This is defined as the weighted average of the four scaled biodiversity indicators, as shown in the following equation.<sup>17</sup> The composite scores are sensitive to the weights, which are chosen to reflect the relative contribution of each indicator to the GEF's objectives. After extensive consultation with biodiversity experts on current best practice, the base-case simulations give larger weights to species indicators because these are characterized by greater certainty. The weights are defined below.

$$\text{CEC Biodiversity Score} = W_{T1} \times \text{Represented Species} + W_{T2} \times \text{Threatened Species} \\ + W_{T3} \times \text{Represented Ecoregion} + W_{T4} \times \text{Threatened Ecoregion}$$

$$\text{Where } W_{T1} + W_{T2} + W_{T3} + W_{T4} = 1$$

$$W_{T1}=0.40; W_{T2}=0.40; W_{T3}=0.10; W_{T4}=0.10$$

### **Compute the Terrestrial Biodiversity Score for each Country**

24. The fourth step in determining the terrestrial score for a country is to sum the terrestrial scores for all CECs within it.

### **Marine Biodiversity Score for each Country**

25. The marine score for each country is developed in a much simpler way, because of the lack of detailed subnational data. The available information registers the presence of specific

<sup>17</sup> The first step in computing the composite terrestrial score is to scale all of four indicators uniformly. This ensures that one-point changes in all four indicators will have the same impact on the composite score if they are equally weighted.

fish species within a country's waters, but does not provide data on precise ranges, extinction threats, or relative uniqueness of marine ecosystems. Consequently, the marine score is based solely on represented fish species. Each evaluated species receives a total credit of 1 globally, which is distributed across countries in proportion to the estimated habitat for the species in the respective country.<sup>18</sup> The marine score for a country is the sum of the credits from all of the marine species located in the territorial waters of the country.

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<sup>18</sup> The habitat in each country is approximated by its EEZ. A country's share of habitat for each species is the share of its EEZ area in the total EEZ area for countries where the species is registered.

## ANNEX 6: OPERATIONALIZATION

### GEF RESOURCE ALLOCATION FRAMEWORK

#### OPERATIONALIZATION

##### Background

1. During Council consultations held in Paris in March 2005, Council Members asked for further clarification on a series of technical issues related to the Resource Allocation Framework to facilitate their internal consultations prior to the June Council Meeting. This is the sixth note in the series. It focuses on the key issues in operationalizing the RAF.
2. The Secretariat and the three Implementing Agencies (UNDP, UNEP, and the World Bank) have held discussions on several occasions, and note the following issues associated with operationalizing the RAF.

##### Implementing the Screening Phase

3. All of the motions on the RAF tabled during the November 2004 meeting, propose that the Screening Phase described in GEF/C.24/8 be implemented beginning with the first work program following Council decision on the RAF.<sup>19</sup> Prior to the implementation of the Screening Phase, Council needs to:
  - (a) Adopt the proposed GEF Benefits Index, GBI, for Biodiversity and Climate Change as described in the fourth and fifth technical notes in this series.
  - (b) Agree to the specific content and method for determining the GEF Performance Index, GPI, as described in the first technical note in this series.
  - (c) Agree on a public disclosure policy for the GBI and GPI indicators as described in the second technical note in this series.
  - (d) Agree to the proposed set of decision rules for categorizing countries into low/high benefit countries and low/high performance countries (see GEF/C.24/8 for details).
  - (e) Agree on the proposed manner in which resource access will be limited for low benefits countries (see GEF/C.24/8 for details).

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<sup>19</sup> The screening phase categorizes countries into high/low benefit countries based on GEF Benefits Index (GBI) and high/low performance countries based on GEF Performance Index (GPI). Separate rules would apply for countries based on their benefits and performance classification.

- (f) Agree on whether the resource limits on countries in (e) apply only to the remaining work programs of GEF3 or need to take into account all of projects approved in GEF3.
- (g) Agree on a detailed set of ring-fencing rules to be used for projects from low performing countries. These procedures include higher level of scrutiny in the review, approval, and implementation process, including special safeguards and risk management modalities.
- (h) Agree on a set of rules for an appeals process that would be applicable when exemptions are sought from the adopted rules. These rules would specify the parties that can appeal, the conditions under which such appeals can be made, and the process to adjudicate such appeals.

4. Throughout its deliberations on the RAF, the Council has vigorously discussed items (b) and (c) related to the contents of the GEF performance index and the associated public disclosure rules. The Screening Phase cannot be implemented until these two issues have been fully resolved. With items (b) and (c) resolved, the earliest that the Council can review and approve a fully specified Screening Phase, including other items listed above, is at the November 2005 Council meeting to be effective for the first work program following that meeting.

5. Should the Council agree to implement a country and group allocation phase beginning in GEF4, the screening phase would be a transitional phase applicable to only two work programs. Given these circumstances, the Council may want to consider by-passing the screening phase altogether. Such a decision would allow the Secretariat and the Agencies to focus on implementing the country and group allocation phase instead of spending time and resources on a framework that would be applicable only for two work programs.

#### **Country-level Programming in the Country and Group Allocation Phase**

6. In addition to the project level programming that is currently in place, the RAF will permit, for the first time, GEF-focused country level programming based on a country's allocation amount. The Secretariat and the Implementing Agencies agree that the Implementing/Executing Agencies will continue to be responsible for dialoguing with the eligible countries and programming at the project level in light of the more than a decade long experience and the comparative advantage of the Agencies vis-à-vis the Secretariat in detailed programming. These programming dialogues between the countries and the Agencies will be informed by the resources available to each country under the RAF. To begin with, the Secretariat will chair annual inter-agency business plan preparation meetings to facilitate the coordination of the Agencies' portfolios to ensure consistency with RAF allocations, GEF-4 programming targets, Agency comparative advantage, and portfolio management rules. As experience is gained, these arrangements will be reviewed to specify in detail the roles and responsibilities of the Secretariat and the Implementing/Executing Agencies and the stakeholders in the countries.

## **Grouping of Countries in the Country and Group Allocation Phase**

7. The technical note on thresholds in this series indicated that the threshold-level determines the number of viable country groups in the Country and Group Allocation Phase. The threshold level demarcates which countries receive individual allocations and which countries belong to groups.

8. In the November 2004 document, under the country and group allocation phase, it was recommended that countries with indicative allocations larger than \$10 million receive individual allocations. Countries with indicative allocations between \$1 million and \$10 million are divided into three groups based on their respective indicative allocations (Group I: \$6 to \$10 million, Group II: \$3 to \$6 million and Group III: \$1 to 3 million). The aggregate indicative allocation for each of the three groups is equal to the sum of the indicative allocations for the countries belonging to each group. In addition, countries with indicative allocations of less than \$1 million receive an allocation of \$1 million, which is the floor allocation for all countries.

9. Should the threshold-level be reduced to \$6 million as modeled in the “thresholds” technical note in this series, it is suggested that there be only one group for all countries below the threshold. This would improve operational flexibility and would enhance the chances that viable projects would be developed in a significant number of countries which belong to the group.

## **Floors in the Country and Group Allocation Phase**

10. In the November 2004 document on the RAF, it was proposed that the RAF contain a floor of \$ 1 million under each of the focal areas of biodiversity and climate change. A floor is not a guarantee, but a minimum indicative envelope against which countries will have to submit technically qualified projects to assess GEF resources. Based on their operational experience, the Implementing Agencies have suggested that operational flexibility would be improved if the floors were defined as activity floors rather than dollar-amount floors. For example, the RAF could guarantee all eligible countries the level of resources required to meet the fundamental obligations of the respective conventions, such as regular reporting to the conventions. Such an approach would provide for more realistic programming for small countries in the groups.

11. Another option, suggested by the Implementing Agencies, would be for the \$1 million floor to be applied in aggregate to regional groups of countries rather than to individual countries. Such an approach would facilitate dialogue among a group of countries that are regionally organized to come up with a GEF program that contains a combination of regional and country-level projects; this could mitigate the inherent bias in the RAF against regional projects.

## **Administrative Costs**

12. In the November 2004 document on the RAF, some indicative figures were provided for administrative costs for the Secretariat and the Agencies. It is expected that more reliable figures

could be provided as the Secretariat and the Agencies work out more details regarding implementation issues in the months ahead. The actual costs will depend on the actual configuration of the final RAF framework.

13. The Secretariat costs will be associated with developing, maintaining, and updating the RAF framework, including any data-related costs, keeping track of country/group allocations, monitoring the implementation of the RAF, and undertaking adjustments as requested by the Council. For the FY05 and FY06 fiscal years, the Secretariat costs associated with the RAF have been funded through special initiative budget requests. It is anticipated that requests for resources to cover Secretariat costs in subsequent years will be made under the Corporate Budget.

14. The Agencies have indicated that they anticipate the costs of RAF implementation to be associated with the increased costs of coordination at country-level programming, and that this burden would be carried largely by task teams preparing and implementing GEF projects. If this turns out to be the case, the Agencies have suggested that these additional costs be recouped through the project cycle management fees. As operational experience is gained with the RAF, it would be useful to revisit the project fee policy and present it for Council review to make appropriate provisions, if necessary.