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REVISED GEF-5 PROGRAMMING DOCUMENT (PREPARED BY THE GEF SECRETARIAT)

LIST OF ACRONYMS

ABS	Access and Benefit Sharing
AfDB	African Development Bank
AsDB	Asian Development Bank
BBOP	Business, Biodiversity and Offsets Program
CBD	Convention on Biological Diversity
CEIT	Countries with Economies in Transition
CEO	Chief Executive Officer (of the GEF)
CHM	Clearinghouse Mechanism
COP	Conference of the Parties (to a convention)
CPF	Collaborative Partnership on Forests
CSO	Civil society organization
CSP	Country Support Program
DDT	D ichloro d iphenyl t richloroethane
EBRD	European Bank for Reconstruction and Development
EGTT	Expert Group on Technology Transfer
FAO	Food and Agriculture Organisation
FAS	Focal Area Set-aside
GEB	Global Environment Benefit
GEF	Global Environment Facility
GHG	Greenhouse Gas
HCFC	Hydrochlorofluorocarbon
IAASTD	International Assessment for Agricultural Knowledge, Science, and Technology
	for Development
IDB	Inter-American Development Bank
IFC	International Finance Corporation (of the World Bank Group)
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IW	International Waters
IWRM	Integrated Water Resource Management
KM	Knowledge Management
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LME	Large Marine Ecosystem
LULUCF	Land Use, Land Use Change, and Forestry
MDB	Multilateral Development Bank
MDG	Millennium Development Goal
MPA	Marine Protected Area
MRV	Measurable, Reportable, and Verifiable
NAMA	Nationally Appropriate Mitigation Action
NBSAP	National Biodiversity Strategy and Action Plan
NDI	National Dialogue Initiative
NGO	Non-governmental organization
NLBI	Non-Legally Binding Instrument on Forests
NLBI	Non-Legally Binding Instrument on Forests

ODS	Ozone Depleting Substances
OPS-4	Fourth Overall Performance Study of the GEF
PCB	Polychlorinated Biphenyl
PES	Payment for Ecosystem Services
POPs	Persistent Organic Pollutants
PPP	Public Private Partnership
PTS	Persistent Toxic Substances
RBM	Results Based Management
REDD	Reducing Emissions from Deforestation and Degradation
SAICM	Strategic Approach to International Chemicals Management
SCCF	Special Climate Change Fund
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SGP	Small Grants Programme
SIDS	Small Island Developing States
SME	Small and Medium Enterprise
STAP	Scientific and Technical Advisory Panel (of the GEF)
TAG	Technical Advisory Group
TFA	Tropical Forest Account
TEEB	The Economics of Ecosystems and Biodiversity
TNA	Technology Needs Assessment
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Program
UNESCO	United Nations
UNFF	United Nations Forum on Forests
UNFCCC	United Nations Framework Convention on Climate Change
WHO	World Health Organisation
WSSD	World Summit on Sustainable Development

EXECUTIVE SUMMARY

The GEF's fifth replenishment period will cover GEF operations and activities for the four years from July 1, 2010 to June 30, 2014. The overall approach to programming builds on the achievements of the first four phases of the GEF, and on the refinements made in the focal area strategies during GEF-4. The *Revised GEF-5 Programming Document*, prepared by the GEF Secretariat, builds upon the GEF/R.5/19/Rev.1, *GEF-5 Programming Document*, discussed by the Contributing Participants at the October 2009 Replenishment Meeting held in Paris, and reflects findings from the Fourth Overall Performance Study of the GEF (OPS-4), as well as feedback from the Participants, GEF Agencies, STAP, NGOs, and other stakeholders.

The paper presents, inter-alia: (i) focal area strategies, and cross-cutting theme strategies; (ii) an approach to enhancing engagement with the private sector; (iii) a corporate programs strategy; and (iv) a results-based management framework, including monitoring and reporting on results. The paper presents information on possible programming approaches at different replenishment levels and on different possible programming levels across focal areas.

Focal Area Strategies

Overall, the GEF-5 focal area strategies reflect the strategic positioning for GEF-5, and a move towards a transformational scale-up of activities, thereby forming the basis for the proposed GEF-5 replenishment targets.

An approach to programming is proposed that will provide opportunities for supporting transformational programs in several countries with the objective of generating significant global impacts, comprised of: (i) support to countries to prepare *Voluntary National GEF Business Plans* that will serve as a framework for programming GEF resources; and (ii) a *Sustainable Forest Management Program* that will combine resources and objectives in more than one GEF-focal area and provide countries with additional resources on top of their respective country allocations.

Enhancing Private Sector Engagement

Complementing the focal area strategies is an approach to further enhancing the engagement with the private sector, with the Earth Fund established together with the IFC in GEF-4, as a major element. The outline of a business plan for the Earth Fund is proposed, with the objective of leveraging resources from the private sector and seeking long-term financial sustainability.

Corporate Programs Strategy

Supporting the focal area strategies is a revised approach to Corporate Programs, shaped around each country's *Voluntary National GEF Business Plan*. It is proposed that the *National Dialogue Initiative* be incorporated into the *Country Support Program*. A highlight of the cross-cutting capacity development activity is the creation of a GEF project management curriculum in collaboration with local/regional universities in recipient countries. The successful Small Grants

Program will be further strengthened with the upgrading of mature country programs in GEF-5. The role of civil society organizations, both in the national planning exercises, and in project implementation will be strengthened. The incipient conflict resolution mechanism, established at the Secretariat in GEF-4, will be provided with a more formal structure and elements in GEF-5.

Results-based Management Framework

Underpinning all of the above is the GEF Results-based Management Framework that aims to link the focal area and corporate program objectives to four strategic corporate goals of the GEF, and to strengthen the monitoring and knowledge management functions in the GEF.

Replenishment Scenarios

The GEF has been replenished with over \$10 billion in its 15-year history, and leveraged these resources four times over. Yet replenishment levels have stayed static, resulting in decreasing real value in each replenishment. At the same time, the demand for resources to meaningfully tackle global environmental problems is estimated at hundreds of billions of dollars. Therefore, at the outset, it is important to target for GEF-5 a replenishment amount that is both a significant increase, and still manageable for the GEF partnership over the next four years.

Accordingly, the programming document presents approaches across all focal areas/themes for three replenishment targets ranging from \$4.5 billion to \$6.5 billion:

The GEF-5 replenishment target of **\$4.5 billion** is approximately a 50 percent increase over GEF-4 levels in nominal terms. It would provide for increases in activities across all focal areas.

The replenishment target of **\$5.5 billion** is a 75 percent increase over GEF-4 levels in nominal terms. It would provide for strong increases in all focal areas.

A target of **\$6.5 billion** would represent a doubling of the current level (100% increase), with real potential for enhanced impact. It would provide scope for significant increases in all focal areas, and would improve the feasibility of a pragmatic resource allocation system.

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INTRODUCTION

1. At the Third Meeting for the Fifth Replenishment of the GEF Trust Fund, held in Paris, France on October 14-15, 2009, Participants discussed GEF/R.5/19/Rev.1, GEF-5 Programming Document, covering, inter-alia: (i) focal area strategies; (ii) an approach to enhancing engagement with the private sector; (iii) a corporate programs strategy, and (iv) a results-based management framework, including monitoring and reporting on results.

2. While concurring with the broad directions of the strategies presented in the programming document, Participants requested that the document be revised to reflect significant increases in replenishment targets, but within realistic scenarios that reflect 50%, 75%, and 100% increases over the GEF-4 replenishment levels. Accordingly, responding to the comments received, the Secretariat has prepared this document, GEF/R.5/22, *Revised GEF-5 Programming Document*, with three replenishment scenarios -- \$4.5 billion, \$5.5 billion, and \$6.5 billion – for discussion at the November 2009 Replenishment Meeting.

PROGRAMMING FOR GEF-5

3. Following a restructuring in 1994, the GEF Trust Fund was replenished (GEF-1, 1994-1998) at \$2.0 billion for a 4-year period. In 1998, the Trust Fund was replenished at \$2.75 billion (GEF-2, 1998-2002); in 2002, donors committed \$3 billion to GEF-3 (2002-2006); and in 2006, contributing Participants committed \$3.135 billion to GEF-4 (2006-2010). Negotiations on the Fifth Replenishment of the GEF began in March 2009.

4. The Fifth Replenishment period is expected to cover GEF operations and activities for the four years covering July 1, 2010 to June 30, 2014. The focal area strategies are built on work undertaken by the Technical Advisory Groups (TAGs)¹ established by the CEO and on feedback received from the GEF Agencies and other stakeholders.

5. The overall approach to programming in GEF-5 builds on achievements in the pilot and first four phases of the GEF and on the refinements made to the focal area strategies during GEF-4. These strategies, while continuing to address the main objectives of the conventions, are designed to be supportive of the sustainable development needs of recipient countries in their pursuit of the millennium development goals, particularly goal #7 on environmental sustainability.

6. Addressing gender and social issues in GEF projects are critical as they are important drivers and incentives for achieving global environmental benefits and for the overall success of the projects. Gender and social issues will be addressed through the focal area strategies and project cycle, particularly with gender sensitive social and economic analysis, gender disaggregated indicators, and monitoring and evaluation exercises.

¹ The TAGs are comprised of experts selected by the Secretariat from research institutions and NGOs, STAP panel members, and representatives of the various conventions. The TAGs have been active since January 2009.

7. Overall, the GEF-5 focal area strategies reflect: (i) a strategic positioning for GEF-5; (ii) a move towards a transformational scaling-up of activities; and (iii) the associated replenishment target scenarios for GEF-5.

Strategic Positioning for GEF-5

8. The strategic positioning for GEF-5, as first outlined in GEF/R.5/7/Rev.1, and discussed at the First Replenishment Meeting in March 2009, proposed: (i) six strategic elements for GEF-5; and (ii) reforms in five interconnected areas.

Six Strategic Elements

9. The six strategic elements, while reflecting the various strengths that the GEF has developed, also point towards areas where the GEF needs to enhance its involvement:

- (a) <u>Continuing as a key operating entity of the financial mechanism of the major global</u> <u>environmental conventions</u> by providing assistance to a large number of countries through a comprehensive approach employing investment, technical assistance and scientific assessment, and by embodying an integrated approach that links different conventions and focal areas;
- (b) <u>Functioning as the coordinator and/or manager of several funds</u>, building on the track record of managing funds entrusted to the GEF by the United Nations Framework Convention on Climate Change (UNFCCC);
- (c) <u>Pioneering combinations of grant and non-grant instruments</u> to support investments of a transformative scale;
- (d) <u>Maintaining focus on innovation</u>, catalyzing supporting cutting-edge technologies and policy reforms with the objective of enabling replication and scaling-up;
- (e) <u>Enhancing engagement with the private sector</u>, building upon advances made in GEF-4 through the Earth Fund; and
- (f) <u>Refining focal area strategies</u> to reflect the emerging scientific and policy understandings.

10. The six strategic elements are supported by reform proposals covered in GEF/R.5/23, *Policy Recommendations for the Fifth Replenishment of the GEF Trust Fund.*

Transformational Scaling-up of Activities

11. Four replenishments and a pilot phase have provided the GEF resources totaling over \$10 billion over its 15-year history. Having leveraged these resources four times over, the GEF, along with its partner Agencies, has established a strong track-record of catalyzing innovative approaches for investment, technical assistance, and scientific assessment, and of helping developing countries generate global environmental benefits in the context of national sustainable strategies.

12. To place GEF activities in perspective, the demand for resources to meaningfully tackle global environmental problems is estimated at hundreds of billions of dollars. To deal with climate change mitigation, for example, it is estimated by the UNFCCC that \$200 billion per year will be

required by 2030 as additional investment, half of it in developing countries, for new low-emission technologies, if emissions are to be reduced by 25 percent of 1990 levels. Moreover, new technologies will need to be developed and implemented to achieve emissions reductions beyond 2020. The Expert Group on Technology Transfer (EGTT) interim report on funding for new technologies estimates an additional \$300 billion to \$1 trillion a year. To reverse rapid degradation of natural resources and to preserve ecosystem services, estimates from intergovernmental and major international processes run as high as \$50 billion per year.² The assessment of funding needs of developing countries and countries with economies in transition conducted by independent experts under the Stockholm Convention estimates \$4.5 billion for the period 2010-2014. This is in addition to largely unmet needs of \$3.4 billion for the period 2004-2009 – and these only for the 66 countries that had submitted their national implementation plan at time of the analysis.

13. Therefore, it is important to target an amount for the GEF-5 replenishment that is significant enough to be responsive to funding needs. The programming targets must be achievable for the GEF partnership over the next four years while setting the stage for increasingly more robust replenishments subsequently. A significant increase in the replenishment level over that of the GEF-4 level is essential to ensure that the GEF performs as a credible financial mechanism in fulfilling its current mandate with respect to the various conventions and is also geared to undertake additional mandates that may emerge. The programming strategies for GEF-5 reflect this upscaling of activities and are in line with the obligations and guidance from the conventions.

14. Three scenarios, with overall programming targets of \$4.5 billion, \$5.5 billion, and \$6.5 billion are proposed, with details for programming targets within the different focal areas and themes.

15. An approach to funding is proposed that will provide opportunities for supporting transformational programs in several countries, which in turn are bound to generate significant global impacts. The steps to the approach are outlined below.

Voluntary National GEF Business Plans

16. All recipient countries will have access to GEF resources to prepare voluntary *National GEF Business Plans* that will serve as a basis for seeking GEF support. These plans will be prepared by national steering committees,³ coordinated by the GEF operational focal point, and shall link with other planning processes in the country, including any planning processes of GEF Agencies.

17. The business plans will be used as tools and will build upon the engagement that the GEF Secretariat had with recipient countries at the beginning of GEF-4, when telephone consultations were initiated to discuss programming under the Resource Allocation Framework. The plans are to indicate the programming directions to be undertaken by countries and should also help to develop better regional programs/projects based on national priorities. The GEF Secretariat will facilitate

² UNEP/CBD/WG-R1/2/INF/4, *Review of Implementation of Articles 20 and 21: Review of the availability of financial resources*, June 28, 2007.

³ This committee will be chaired by the country's GEF operational focal point, and should include, inter-alia, the ministries of environment, agriculture, industry, energy, planning and finance, convention focal points, GEF Agencies, SGP national coordinator, as well as representatives of civil society organizations.

the preparation of the business plans, and the GEF will make available financial support of up to \$30,000 to each country under the corporate programs.

18. Preparation of business plans, however, will not be a pre-requisite for obtaining GEF grants. Principles of transparency and inclusiveness of national stakeholders, including the community service organizations, will be encouraged in the preparation of the business plans. For details, refer to the section on corporate program strategy.

Transformative Programs in Sustainable Forest Management

19. Programmatic approaches or major multi-focal area projects that combine resources and objectives in more that one of GEF's focal areas of biodiversity, climate change, international waters, and land degradation, aiming for a transformative impact in sustainable forest management, will receive additional resources as incentives on top of their respective country allocations. For details, see the section on Sustainable Forest Management.

OVERALL APPROACH TO FOCAL AREA STRATEGIES

20. The focal area strategies and the cross-cutting theme strategies are presented in the context of a GEF Corporate Results-based Management Framework. The focal area strategies cover: (i) biodiversity; (ii) climate change mitigation; (iii) international waters; (iv) land degradation; and (v) chemicals, including POPs and ODS. A strategy is presented for the cross-cutting theme of sustainable forest management. The programming document also outlines an approach towards enhancing engagement with the private sector, a corporate programs strategy, and an approach to implementing the GEF Results-based Management Framework.

21. The focal area strategies are presented in two parts. This document presents brief descriptions of the strategies and the results frameworks against different replenishment scenarios for the focal areas and cross-cutting themes. These focal area results frameworks include indicators and targets that can be aggregated to the portfolio level in support of GEF goals as indicated in Figure 1. Detailed focal area strategies, supporting the results frameworks, are compiled in an information document, GEF/R.5/Inf.21, *GEF-5 Focal Area Strategies*, presented for the November 2009 Replenishment Meeting.

22. The implementation of focal area strategies for GEF-5, and the tracking of their implementation through the results frameworks, will be closely aligned with managing performance, measuring results with standardized approaches, assessing risks on an on-going basis, and fostering learning. Results-based management (RBM) has been on the GEF agenda for several years, is codified in GEF policy, embedded in focal area strategies and helps to drive reporting.

GEF Results Architecture

23. The GEF enables countries to generate agreed global environmental benefits and services, and to support global environmental conventions. The proposed results architecture presented in this section identifies four broad, corporate-level strategic goals, each with a select number of indictors and accompanying targets. For some indicators, where targets cannot be set, e.g., new

areas of intervention, a baseline will be undertaken for each project and targets will be established at the project-level. The four strategic goals cover all activities under the mandate of the GEF:

- (a) <u>Strategic Goal 1</u> Conserve, sustainably use, and manage biodiversity, ecosystems and natural resources globally, taking into account the anticipated impacts of climate change.
- (b) <u>Strategic Goal 2</u> Reduce global climate change risks by: 1) stabilizing atmospheric GHG concentrations through emission reduction actions; and 2) assisting countries to adapt to climate change, including variability.⁴
- (c) <u>Strategic Goal 3</u> Promote the sound management of chemicals throughout their lifecycle to minimize the effect on human health and global environments.
- (d) <u>Strategic Goal 4</u> Build national and regional capacities and enabling conditions for global environmental protection and sustainable development.

24. Focal area goals and objectives will align to a specific strategic goal. Individual projects will directly reflect the objectives and implementation priorities of countries, and support the contribution to one or more focal areas and GEF strategic goals. The GEF Results Chain, depicted in Figure 1, shows three results levels: project, focal area or portfolio-level, and corporate-level. The GEF Secretariat is responsible for measuring results at the focal area or portfolio-level and at the corporate-level. GEF Agencies will ensure the measurement of results at the project-level.

25. The GEF-5 approach to RBM, the corporate results framework and effective and efficient management indicators are presented in the RBM section.



Figure 1: GEF Results Chain

⁴ The GEF Trust Fund will provide resources for climate change mitigation, while climate change adaptation will be funded though the Least Development Country Fund (LDCF) and Special Climate Change Fund (SCCF), both UNFCCC funds mandated to be managed by the GEF.

The Imperative of an Integrated Approach to Global Environmental Goods

26. One of the major strengths of the GEF as a financial mechanism is its ability to support activities in recipient countries that, within the context of their sustainable development needs, can help meet their commitments to more than one global convention. The major environmental conventions (UNFCCC, CBD and UNCCD, in addition to the non-binding UNFF) have highlighted the inter-linkages that exist between their respective global environmental objectives. These conventions recommend actions to promote complementarity and synergy in seeking multiple environmental benefits, together with avoiding any trade-offs or negative impacts. Therefore, even though the GEF strategies are articulated focal area by focal area, and draw closely on convention guidance, project design and implementation activities can increasingly seek synergies and connections across the different focal areas, reflecting the multiple needs of recipient countries. The preparation of voluntary *National GEF Business Plans*, if undertaken in a transparent and inclusive manner, provides the opportunity to strategically direct the potential for GEF investments to address multiple objectives.

27. The rationale championed by the GEF for promoting synergies and avoiding trade-offs include: (i) achieving sustained flow of global environmental benefits; (ii) securing multiple global environmental benefits, including in other focal areas, from cost-effective GEF investments in one focal area; (iii) avoiding negative impacts; and (iv) avoiding future adaptation cost.

28. Globally, the climate change problem has been well articulated, and has finally caught the attention of decision-makers at all levels. In its wake there remains a series of other complex interacting drivers impacting natural systems – in particular biodiversity, forests, land, and water. Widespread changes are starting systematically to affect the provision of ecosystem goods and services, from climate stability globally and regionally all the way to local services on which rural and coastal communities depend for their survival and livelihood on a daily basis.

29. The progressive deterioration in the provision of ecosystem goods and services is being triggered by natural resource management decisions, human population growth and growing per capita consumption, and is being aggravated by climate change. For example, land degradation already affects about 2.6 billion people across more than 100 countries. Degraded land is costly to reclaim and, if severely impacted, diminished ecosystem functions lead to a loss of environmental, social, economic and non-material benefits that are critical for society and for its development options. For example, the financial loss due to land degradation in Latin America and the Caribbean is estimated to be more than 27 billion dollars annually.

30. Access to food and water is threatened in many countries to such an extent that it is emerging as a problem of global proportions, while the competition for access to transboundary water resources has become a national security issue for several nations. With 85% of water use in some countries now being devoted to agriculture, management of hydrological resources represents a critical step in addressing food security. Without it, one billion people and more will still drink from contaminated sources, and hundreds of millions more will continue to lack water for their crops because of upstream over-utilization for irrigation and other purposes.

31. These are not theories about the future. For instance, there are already many transboundary groundwater, river, and lake basins subject to intense conflicts over water use and fisheries depletion. Water, environment, and community security is at risk in these basins, as river flow and

aquifer levels are depleted and community livelihoods, food sources, and health are impacted. These multi-country tensions over water resources are being worsened by an increase in extreme events such as floods and droughts and, for example, by the loss of glaciers in South America and South Asia induced by climate change that promises to destabilize societies with water and food shortages. Conversely, better natural resource stewardship and water resource policy reforms reduces the social and economic impact of political turmoil events, or even prevent them from happening in the first place.

32. The situation for the oceans has been equally serious. Many commercial fish species are becoming economically extinct with recent surveys showing 63 percent of fish stocks globally needing intensive management toward rebuilding biomass and diversity due to exploitation. With this level of exploitation, productivity of marine fish stocks has been reduced, fish species composition has been dramatically altered, and fishing effort has increased further in futile attempts to maintain catches at the same levels of return. A recent analysis from the World Bank and FAO calculated an annual loss of about \$50 billion arising from depleted fish stocks and poor fisheries management, with a cumulative trillion dollar economic loss during the last 30 years arising from destructive economic incentives. With coastal ocean temperatures documented to be warming 3-5 times more rapidly than the projections of the Intergovernmental Panel on Climate Change (IPCC), and the capacity of marine ecosystems to sequester one half of the planet's carbon becoming impaired, there is no time to waste if reductions in coastal livelihoods, food security, exports and economic growth are to be reversed. This finding is not exclusive to the impacts in the marine realm; it is widely accepted that the overall costs and risks of climate change will far exceed the cost of action to mitigate emissions over the next few decades.

33. While the more recent focus of the international community is on climate change, the progressive depletion of nature's assets is reflected symptomatically in the mounting loss of biodiversity – estimated at 100 to 1000 times the historical extinction rates. The Millennium Ecosystem Assessment, a major global effort to assess the consequences of ecosystem change for human well-being and to establish the scientific basis for actions needed to conserve and sustainably use ecosystems, reported in 2005 that 60 % (15 out of 24) ecosystem services are being degraded or used unsustainably. Ecosystem loss and degradation of this magnitude, compounded by climate change, further accelerates the loss of species, reduces current and future services to societies, and disproportionately impacts poor people. Unless conservation actions are stepped up in the near future, we may be well beyond the threshold limits of no return for many of the components of biodiversity, the only global environmental good whose loss is irreversible.

34. Cost estimates for reversing these trends run as high as \$50 billion per year.⁵ The Economics of Ecosystems and Biodiversity (TEEB) study estimates that per capita "GDP of the poor" in India is estimated to be about \$95 capita per annum after including ecosystem services. If these services were denied, however, the cost of replacing lost livelihood, equity adjusted, would be 50 percent higher. Conversely, the costs of conservation compare in extremely favorable ratios with the benefits they provide. For example, it has been calculated that for an annual investment of US\$ 45 million directed towards protected areas – around a sixth of that needed to manage protected

⁵ UNEP/CBD/WG-R1/2/INF/4, *Review of Implementation of Articles 20 and 21: Review of the availability of financial resources*, June 28, 2007.

areas worldwide – we could continue to secure ecosystem services provided by protected areas worth some US\$5 trillion (a benefit-cost ratio of 100:1).

35. In essence, wherever we look, it becomes increasingly evident that in the long haul protecting and sustainably managing natural capital is not only a very worthwhile economic investment, but vital to keeping open future human development options. The GEF strategies for the next replenishment cycle reflect this realization and are built upon the experience accumulated over the past 18 years of funding projects and programs across the various focal areas that are integral to the sustainable management of global environmental goods and natural resources.

36. The GEF is well positioned to tackle these challenges in an integrated way because of the existing inter-linkages between its focal areas; which will be developed further to highlight cross-focal synergies and avoidance of trade-offs in the individual focal area strategies. For example, ecosystems (forests, grasslands, wetlands, etc.) are highly vulnerable to the projected climatic changes. According to the IPCC, climate change will lead to "*major changes in ecosystem structure and functions, species' ecological interaction and geographical ranges with predominantly negative consequences for biodiversity and ecosystem goods and services*". Positive synergy is illustrated, where conservation of biodiversity in forests, grasslands and wetlands leads to increased resilience to climate impacts, as well as conservation of carbon sinks. Sustainable forest management practices could provide multiple global environmental benefits while reducing the vulnerability of forest ecosystems to climate impacts, conserving biodiversity and enhancing carbon stocks. Integrated approaches for improved water resources management, as part of "Biodiversity-Land Degradation-Adaptation-International Waters" projects, can help with the transition to the sustainable use of specific landscapes, catchments, seascapes or wetland basins.

37. Climate change directly affects biodiversity and desertification. The more intense and farreaching climate change is, the greater will be the loss of plant and animal species. Climate change could exacerbate the expansion of degraded lands, deserts and semi-arid regions, potentially leading to further increase in carbon dioxide emissions. This could adversely impact food and grass production in rain-fed land systems, even up to 50 percent in some regions. Sustainable land management can provide multiple global environmental benefits - increasing carbon stocks in soil, vegetation, and litter and reducing agricultural emissions of greenhouse gas. Sustainable forest management practices can also contribute by reducing greenhouse emissions and sequestering carbon.

38. For GEF-5, the climate change mitigation strategy has been designed to help guide developing countries and economies in transition toward a low-carbon development path. This goal will be tackled by promoting the adoption of low-carbon technologies, market transformation in specific industries and in the building sector, as well as sustainable transport in urban systems. The climate change strategy will also include investments in new renewable energy technologies, particularly for least developed countries.

39. Supporting transversal investments in these focal areas, GEF-5's Sustainable Forest Management and LULUCF strategy will orient the programming of resources for managing forest ecosystems to securing multiple environmental benefits, particularly those related to the protection and sustainable use of biodiversity, climate change mitigation and adaptation, and combating land degradation. These objectives are consistent with those permeating the GEF focal areas of Biodiversity, Climate Change, International Waters, and Land Degradation, and will be brought together in comprehensive and cost-effective projects and programs to address forest management across all types of forests.

Focal Area Strategies

40. The next section contains strategies in the different focal areas and cross-cutting themes. The description of each focal area strategy is followed by a description of deliverables against three overall replenishment scenarios of \$4.5 billion, \$5.5 billion, and \$6.5 billion.

41. Table 8 sets forth proposed indicative funding levels for each focal area and cross-cutting theme, at each of the illustrative replenishment levels of \$4.5 billion, \$5.5 billion, and \$6.5 billion. This menu of options provides Participants with the opportunity to consider either asymmetric or pro-rata allocations to different focal areas and themes at different replenishment levels.

42. Within each focal area/theme, the strategies propose illustrative resource programming levels for each objective with associated results indicators and targets. It is important to note that programming will be largely determined by the resource allocation system, the priorities expressed by countries with regard to their allocations in each focal area, as well as actual financial events in the GEF Trust Fund. Under an operational system so responsive to country needs, proposed focal area objective resource programming levels are difficulty to impose, and therefore it is difficult to systematically achieve the associated results targets. Therefore, these proposed programming levels and results targets should be viewed as indicative.

BIODIVERSITY

43. Biodiversity is defined as "the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems."⁶ As such, biodiversity is life itself, but it also supports all life on the planet, and its functions are responsible for maintaining the ecosystem processes that provide food, water, and materials to human societies. Thus the interventions identified in the biodiversity strategy are integral components of any effective approach for human adaptation to climate change.

44. Biodiversity is under heavy threat and its loss is considered one of the most critical challenges to humankind. The interim report of the global study, "The Economics of Ecosystems & Biodiversity (TEEB)" reinforces the conclusion of the Millennium Ecosystem Assessment that ecosystem services are being degraded or used unsustainably with severe socio-economic consequences for human societies and for the future of all life on the planet⁷.

45. The Millennium Ecosystem Assessment identified the most important direct drivers of biodiversity loss and degradation of ecosystem goods and services as habitat change, climate change, invasive alien species, overexploitation, and pollution. These drivers are influenced by a series of indirect drivers of change including demographics, global economic trends, governance, institutions and legal frameworks, science and technology, and cultural and religious values.

46. The GEF-5 strategy will maintain coherence with the GEF-4 strategy and address a subset of the direct and indirect drivers of biodiversity loss and focus on the highest leverage opportunities to conserve and sustainably use biodiversity. The ninth meeting of the Conference of the Parties of the Convention on Biological Diversity (COP-9) acknowledged that the GEF-4 strategy served as a useful starting point for the GEF-5 strategy and requested GEF to build on it for the fifth replenishment based on the four year framework of program priorities developed by COP-9.⁸ Refinements to the strategy's objectives are introduced based on COP-9 guidance, advances in conservation practice, and advice from the Scientific and Technical Advisory Panel of the GEF.

47. The goal of the biodiversity focal area is the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services. To achieve this goal, the strategy encompasses the five objectives listed below:

- (a) improve the sustainability of protected area systems;
- (b) mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors;
- (c) build capacity to implement the Cartagena Protocol on Biosafety;
- (d) build capacity on access to genetic resources and benefit-sharing; and

⁶ Convention on Biological Diversity.

⁷ Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington DC.

⁸ Decision CBD COP IX/31.

(e) integrate CBD obligations into national planning processes through enabling activities.

Programming for Replenishment Scenarios⁹

\$4.5 to 5.5 billion replenishment (\$1.125 to \$1.375 billion allocated to the biodiversity focal area, respectively, which will potentially leverage about \$3 billion.)

48. The GEF has been widely recognized as the world's most important facility for creating and improving the management of protected areas globally and the key catalyst to the global achievement of 10% of the world's terrestrial areas under protection. However, much more remains to be done, given the uneven distribution of protection within terrestrial ecoregions (some are well above the 10% target, others below) and with regard to conservation of the marine environment, where only 5.9% of the world's territorial seas and less than one-percent of the high seas are protected.

49. The achievements made by the global community with GEF support must be further consolidated through enhancing the sustainability of protected area systems such that they continue to deliver the global benefits of: (i) biodiversity (indirect use and option values, and existence values particularly with regards to threatened species); (ii) provision of ecosystem goods and services, including contributions to climate mitigation; and (iii) ecosystem-based adaptation. Therefore, an investment of \$700 to \$828 million will be made to improve the management effectiveness of protected areas covering an estimated 175 to 200 million hectares, thus continuing GEF's prioritization in helping countries implement their obligations under the CBD Programme of Work on Protected Areas. The additional investment in 175 to 200 million hectares of protected areas of existing terrestrial protected areas in GEF-eligible countries or about 23 % of the area of existing marine protected areas in GEF-eligible countries.

50. Support to mainstreaming under these two scenarios would range from \$212 to \$235 million and lead to sustainable use and management of biodiversity in the productive landscapes or seascapes of about 50 to 60 million hectares.

51. Therefore, coverage of the portfolio as measured in an increase in surface area under improved biodiversity conservation and sustainable use (objectives one and two of the strategy), will reach approximately 225 to 260 million hectares under these replenishment scenarios.

52. Support to capacity building on biosafety (objective three of the strategy) at the programming levels suggested (\$50 to \$80 million) will allow those countries who have not yet implemented national biosafety frameworks (between 60-70 depending on programming for the remainder of GEF-4) to do so while dedicating the remaining resources to regional and thematic projects as outlined in the Council-approved biosafety strategy. Finally, initial capacity building support will be provided in access and benefit sharing (\$50 to 75 million) in response to existing

⁹ The results framework for the GEF-5 biodiversity strategy is outlined in Table 1 along with expected key outputs for each replenishment scenario.

COP guidance and emanating from an agreed international regime at COP-10 (objective four of the strategy).

53. Consistent with the criteria identified below for special initiatives to be funded by the Focal Area Set-Aside (FAS), under both the \$4.5 and \$5.5 billion replenishment scenarios, the biodiversity focal area will partner with the international waters focal area and set aside \$25 million from the FAS to initiate a global pilot program focused on the protection of marine biodiversity in "Areas Beyond National Jurisdiction" (ABNJ) as part of the "Blue Forests" program. This investment will complement GEF's continued focus on increasing marine protected area coverage under national jurisdiction given that about 50% of the Earth's surface is considered the high seas, or marine areas beyond national jurisdiction. These offshore areas harbor about 90% of the Earth's biomass and host a diversity of species and ecosystems, many of which are yet to be discovered. As a result, protection of the high seas has become an emerging priority in biodiversity conservation. Although conservation and management of high seas marine protected areas pose a number governance challenges and legal issues, the GEF believes that it is important to begin learning how to implement and manage marine protected areas in the waters beyond national jurisdiction. The proposed pilot is consistent with CBD COP Decision IX/20.

54. The IPCC has been responsible both for the resolution of important scientific questions related to the nature and extent of the global warming problem, as well as for ensuring those contributions effectively permeate the policy debate at the highest levels. However, the sciencepolicy interface for biodiversity and ecosystem services is fragmented inside and outside of the CBD, impeding a similar incremental process from occurring for the important problem of biodiversity loss and ecosystem degradation. Policy making in biodiversity conservation and ecosystem management at all levels can be further strengthened if supported by credible, legitimate and salient scientific findings and recommendations which are provided by an intergovernmental science-policy platform, that builds on the GEF-funded Millennium Ecosystem Assessment findings. To address this need, CBD COP IX agreed to explore the establishment of an Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). The twenty-fifth session of the UNEP Governing Council/Global Ministerial Environmental Forum adopted Decision 25/10 on the intergovernmental science-policy platform on biodiversity and ecosystem services, which accords UNEP the mandate to continue to facilitate discussions on strengthening the science-policy interface on biodiversity and ecosystem services. Supporting this emerging initiative could be undertaken through a contribution from the FAS.

\$6.5 billion replenishment (\$1.5 billion allocated to the biodiversity focal area which will potentially leverage about \$4.5 billion)

55. Of the 232 marine ecoregions, only 42 meet the 10 percent target and almost half (115) have less than one percent protection. None of the marine realms have reached even 5% protection and areas of particular concern include temperate South America (0.09 percent protected) and temperate Southern Africa (0.22 percent protected), both areas with high levels of marine biodiversity. ¹⁰ In recognition that much more remains to be done with regards to conservation of the marine environment the biodiversity focal area will dedicate the additional resources available for programming in biodiversity under this replenishment scenario to the joint program ("Blue

¹⁰ UNEP-WCMC (2008) State of the world's protected areas: an annual review of global conservation progress, UNEP-WCMC, Cambridge.

Forests") with international waters. These additional resources will be directed towards the creation of new marine protected areas translating into an estimated increase of about 50 million hectares of marine protected areas. Investments would be consistent with the GEF's strategic focus on the key elements of marine protected area system or network sustainability: ecosystem representation, sustainable and predictable levels of financing, and management capacity.

56. Support to all other objectives of the strategy will remain constant under this increased replenishment scenario to ensure maximum impact with the additional investment in marine protected area creation and enhanced management effectiveness.

Focal Area Set-Aside (FAS)

57. Under all replenishment scenarios, countries will be able to access the focal area set-aside funds (FAS) to implement enabling activities for an amount up to \$500,000 on an expedited basis. A total of \$50 - \$80 million will be available for this support through Objective Five of the strategy. Enabling activity support could be provided for revising National Biodiversity Strategies and Action Plans (NBSAPs) in line with the CBD's new strategic plan to be adopted at COP-10, national reporting, and implementation of guidance related to the Clearing House Mechanism (CHM).

58. The remaining funds in FAS, after the contribution to the ABNJ program described above, will be used to address supra-national strategic priorities or to incentivize countries to make substantive changes in the state of biodiversity at the national level through participation in global, regional or multi-country projects. Projects supported with FAS funds will meet some or all of the following criteria: (i) relevant to the objectives of GEF's biodiversity strategy; (ii) support priorities identified by the COP of the CBD; (iii) high likelihood that the project will have a broad and positive impact on biodiversity; (iv) potential for replication; (v) global demonstration value; and (vi) contribute to global conservation knowledge through formal experimental or quasi-experimental designs that test and evaluate the hypotheses embedded in project interventions. An incentive system would operate for all regional projects whereby participating countries would receive resources from the FAS proportionate with the amount of resources dedicated to a project from their national allocation.

Table 1: Biodiversity Results Framework¹¹

Goal: Conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services.

Impacts:

Biodiversity conserved and habitat maintained in national protected area systems.

Conservation and sustainable use of biodiversity integrated into production landscapes and seascapes.

Indicators:

Intact vegetative cover and degree of fragmentation in national protected area systems measured in hectares as recorded by remote sensing. Intact vegetative cover and degree of fragmentation in production landscapes measured in hectares as recorded by remote sensing.

Coastal zone habitat (coral reef, mangroves, etc) intact in marine protected areas and productive seascapes measured in hectares as recorded by remote sensing and, where possible, supported by visual or other verification methods.

Objectives	Expected Outcomes	Outcome targets under	Outcome targets under	Outcome targets under	Core Outputs
	and Indicators	\$4.5 billion Scenario	\$ 5.5 billion Scenario	\$6.5 billion Scenario	
Total Foc	al Area Allocation	1.125 billion	1.375 billion	1.5 billion	
Sustainable	Forest Management	63	77	130	
Objective 1:		700 million	828	900 million	Output 1. New
Improve	Outcome 1.1: Improved				protected areas
Sustainability	management	Eighty-percent (80%) of	Eighty-percent (80%) of	Eighty-percent (80%) of	(number) and coverage
of Protected	effectiveness of existing	projects meet or exceed	projects meet or exceed	projects meet or exceed	(hectares) of
Area Systems	and new protected areas.	their protected area	their protected area	their protected area	unprotected
	Indicator 1.1: Protected	management effectiveness	management	management	ecosystems.
	area management	targets covering 175	effectiveness targets	effectiveness targets	
	effectiveness score as	million hectares of	covering 200 million	covering 225 million	Output 2. New
	recorded by	existing or new protected	hectares of existing or	hectares of existing or	protected areas
	Management	areas.	new protected areas	new protected areas (of	(number) and coverage
	Effectiveness Tracking			which 50 million will be	(hectares) of
	Tool.			new marine protected	unprotected threatened
				areas.)	species (number).
	Outcome 1.2: Increased	Eighty-percent (80%) of	Eighty-percent (80%) of	Eighty-percent (80%) of	Output 3. Sustainable
	revenue for protected	projects meet or exceed	projects meet or exceed	projects meet or exceed	financing plans
	area systems to meet	their target for reducing	their target for reducing	their target for reducing	(number).
	total expenditures	the protected area	the protected area	the protected area	

¹¹ Biodiversity tracking tools have been developed and are now in use for GEF projects in protected areas (objective one), biodiversity mainstreaming including invasive alien species management frameworks (objective two), and biosafety (objective three) and can be found at: <u>http://gefweb.org/interior.aspx?id=230</u>. A tracking tool for objective four on Access to Genetic Resources and Benefit Sharing will be developed as the activities of the objective are finalized in response to the outcome of the current negotiations of the international regime on ABS.

Objectives	Expected Outcomes	Outcome targets under	Outcome targets under	Outcome targets under	Core Outputs
Objective 2: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors	required for management. Indicator1.2: Funding gap for management of protected area systems as recorded by protected area financing scorecards. Outcome 2.1: Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation. Indicator 2.1: Landscapes and seascapes certified by internationally or nationally recognized environmental standards that incorporate biodiversity considerations (e.g. FSC, MSC) measured in hectares and recorded by GEF tracking tool.	 section scenario management funding gap in protected area systems that develop and implement sustainable financing plans. 212 million Sustainable use and management of biodiversity in 50 million hectares of production landscapes and seascapes. 	 3 5.5 billion scenario management funding gap in protected area systems that develop and implement sustainable financing plans. 235 million Sustainable use and management of biodiversity in 60 million hectares of production landscapes and seascapes. 	 30.5 billion Scenario management funding gap for protected area systems that develop and implement sustainable financing plans. 235 million Sustainable use and management of biodiversity in 60 million hectares of production landscapes and seascapes. 	Output 1. Policies and regulatory frameworks (number) for production sectors. Output 2. National and sub-national land-use plans (number) that incorporate biodiversity and ecosystem services valuation. Output 3. Certified production landscapes and seascapes (hectares).
	Outcome 2.2: Measures to conserve and sustainably use biodiversity incorporated in policy and regulatory frameworks.	Fifty-percent (50%) of projects achieve a score of six (6) (i.e., biodiversity conservation and sustainable use is mentioned in sector policy	Fifty-percent (50%) of projects achieve a score of six (6) (i.e., biodiversity conservation and sustainable use is	Fifty-percent (50%) of projects achieve a score of six (6). (i.e., biodiversity conservation and sustainable use is	

Objectives	Expected Outcomes	Outcome targets under	Outcome targets under	Outcome targets under	Core Outputs
	and Indicators	\$4.5 billion Scenario	\$ 5.5 billion Scenario	\$6.5 billion Scenario	
	Indicator 2.2: Polices	through specific	mentioned in sector	mentioned in sector	
	and regulations	legislation, regulations are	policy through specific	policy through specific	
	governing sectoral	in place to implement the	legislation, regulations	legislation, regulations	
	activities that integrate	legislation, regulations are	are in place to	are in place to	
	biodiversity	under implementation,	implement the	implement the	
	conservation as	implementation of	legislation, regulations	legislation, regulations	
	recorded by the GEF	regulations is enforced,	are under	are under	
	tracking tool as a score.	and enforcement of	implementation,	implementation,	
		regulations is monitored)	implementation of	implementation of	
	Outcome 2.3: Improved		regulations is enforced,	regulations is enforced,	
	management	Eighty-percent (80%) of	and enforcement of	and enforcement of	
	frameworks to prevent,	projects meet or exceed	regulations is monitored)	regulations is monitored)	
	control and manage	their target for a fully			
	invasive alien species	operational and effective	Eighty-percent (80%) of	Eighty-percent (80%) of	
	Indicator 2.3: IAS	IAS management	projects meet or exceed	projects meet or exceed	
	management framework	framework.	their target for a fully	their target for a fully	
	operational score as		operational and effective	operational and effective	
	recorded by the GEF		IAS management	IAS management	
	tracking tool.		framework.	framework .	
Objective 3:	Outcome 3.1 Potential	50 million	80 million	80 million	All remaining eligible
Build Capacity	risks of living modified				countries (about 60-70
for the	organisms to	Eighty-percent (80%) of	Eighty-percent (80%) of	Eighty-percent (80%) of	depending on
Implementation	biodiversity are	projects meet or exceed	projects meet or exceed	projects meet or exceed	programming for rest
of the	identified and evaluated	their target for a fully	their target for a fully	their target for a fully	of GEF-4) have
Cartagena	in a scientifically sound	operational and effective	operational and effective	operational and effective	national biosafety
Protocol on	and transparent manner	biosafety framework.	biosafety framework.	biosafety framework.	decision-making
Biosafety	Indicator 3.1: National				systems in place.
(CPB)	biosafety decision-				r in the second s
	making systems				
	operational score as				
	recorded by the GEF				
	tracking tool				

Objectives	Expected Outcomes	Outcome targets under	Outcome targets under	Outcome targets under	Core Outputs
	and Indicators	\$4.5 billion Scenario	\$ 5.5 billion Scenario	\$6.5 billion Scenario	
Objective 4: Build Capacity on Access to Genetic Resources and Benefit Sharing	Outcome 4.1: Legal and regulatory frameworks, and administrative procedures established that enable access to genetic resources and benefit sharing in accordance with the CBD provisions Indicator 4.1: National ABS frameworks operational score as recorded by the GEF tracking tool (to be developed)	50 million Eighty-percent (80%) of projects meet or exceed their target for a fully operational and effective ABS framework.	75 million Eighty-percent (80%) of projects meet or exceed their target for a fully operational and effective ABS framework.	75 million Eighty-percent (80%) of projects meet or exceed their target for a fully operational and effective ABS framework.	Access and benefit- sharing agreements (number) that recognize the core ABS principles of Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) including the fair and equitable sharing of benefits.
Objective Five: Integrate CBD Obligations into National Planning Processes through Enabling Activities	Outcome 5.1 Development and sectoral planning frameworks at country level integrate measurable biodiversity conservation and sustainable use targets. Indicator 5.1: Percentage of development and sectoral frameworks that integrate measurable biodiversity conservation and sustainable use targets.	50 million 50% of parties that revise NBSAPs successfully integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks.	80 million 50% of parties that revise NBSAPs successfully integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks.	80 million 50% of parties that revise NBSAPs successfully integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks.	Number and type of development and sectoral planning frameworks that include measurable biodiversity conservation and sustainable use targets.

CLIMATE CHANGE MITIGATION

59. The Fourth Assessment Report of the IPCC concludes that climate change due to human activities is unequivocal and that global greenhouse gas (GHG) emissions will continue to grow over the next few decades with current climate change policies and development practices. It is widely recognized that the overall costs and risks of climate change will far exceed the cost of action to mitigate climate change.

60. As an operating entity of the financial mechanism of the UNFCCC, since its inception in 1991, the GEF has invested \$2.7 billion in financing climate change mitigation and enabling activities, and has leveraged more than \$17 billion additional investment. The GEF has become the largest public-sector funding source to support the transfer of environmentally sound technologies to developing countries.

Guiding Principles

61. Development of GEF-5 strategy in the climate change focal area has drawn on past experience, and has been guided by three principles: (i) responsiveness to Convention guidance; (ii) consideration of national circumstances of recipient countries; and (iii) cost-effectiveness in achieving global environmental benefits. GEF-5 will endeavor to make a transformative impact in helping GEF-recipient countries to move to a low-carbon development path through market transformation and investment in environmentally sound, climate-friendly technologies.

62. Recent decisions reached by the UNFCCC COP have given guidance to the GEF particularly in the areas of development and transfer of environmentally sound technologies and land use and land-use change. At COP13, the GEF was requested to elaborate a strategic program to scale up the level of investment in technology transfer to help developing countries address their needs for environmentally sound technologies. COP14 welcomed the program presented by the GEF as a step toward scaling up the level of investment in technology transfer to developing countries and renamed it Poznan Strategic Program on Technology Transfer. The COP14 decision also requested the GEF to consider long-term implementation of a strategic program on technology transfer. On LULUCF, COP12 requested the GEF to explore options for undertaking land use and land-use change projects within the climate change focal area in light of past experience. Finally, the Bali Action Plan also highlighted new issues such as establishing measurable, reportable, and verifiable (MRV) systems for nationally appropriate mitigation actions (NAMAs) by developing countries in the context of sustainable development, supported and enabled by technology, financing, and capacity building.

63. GEF-recipient countries vary significantly in terms of their stage of development, technical and institutional capacity, and market potential to reduce GHG emissions. The GEF-5 climate change strategy endeavors to provide options for countries with different national circumstances to tackle climate change mitigation while supporting sustainable development. The GEF will make concerted efforts to integrate the outcomes of the Technology Needs Assessments (TNAs) and National Communications to the UNFCCC, as appropriate, with the other programming objectives under its climate change focal area.

64. The GEF-5 climate change strategy promotes a broad portfolio of environmentally sound, climate-friendly technologies to achieve large GHG reductions in GEF-recipient countries in accordance with their respective national circumstances. The portfolio will include technologies at various stages of the technology development cycle and innovation chain, focusing on market demonstration, deployment, and diffusion, and will involve a combination of technology push and market pull interventions (see **Figure 2**).



Figure 2: Technology Development Cycle and Innovation Chain¹²

65. In GEF-5, a national planning process will be introduced to support countries in identifying priority areas for GEF support in line with the countries' development objectives and climate change policy and strategies. Programming of GEF resources at the country level will be based on the priority sectors, technologies, and activities identified by the countries themselves. The GEF will endeavor to make transformational impacts in GEF-recipient countries, taking national circumstances into consideration. The use of non-grant instruments will be promoted in countries where conditions are suitable and demand exists in order to catalyze commercial financing and leverage investment from the private sector. Building on previous experience, engagement with the private sector will be enhanced and expanded, including with small and medium enterprises (SMEs) in developing countries.

66. In large developing countries and emerging economies, GEF intervention will emphasize opportunities to bring about large GHG reductions, such as market transformation in the building, industry, and transport sectors. In relatively small and low-income countries, GEF support will focus on investment as well as technical and institutional capacity building while promoting energy access through renewable sources of energy. Technology transfer will be promoted in all GEF-eligible countries and at various stages of the technology development cycle. In large developing countries and emerging economies with strong technical capacity and

¹² Source: Adapted from IPCC, 2007: Technical Summary, in Climate Change 2007: Mitigation, Contribution of Working Group III to the Fourth Assessment Report of the IPCC.

market potential, emphasis will be placed on market demonstration and commercialization of innovative, emerging technologies; in small, low-income countries, GEF support will focus on deployment and diffusion of commercially available technologies through investment, capacity building, and technology cooperation. In countries and regions experiencing large GHG emissions from deforestation and forest degradation, the GEF will promote LULUCF activities aimed at reducing forest emissions and promoting forest conservation, afforestation and reforestation, and sustainable forest management.

67. Furthermore, the GEF can play a useful and growing role in the emerging carbon markets, which are expected to increase rapidly in the future. The GEF is uniquely positioned to expand its engagement in the carbon markets given its extensive network of partner institutions, its rich experience in financing clean energy and sustainable urban transport and in promoting the transfer of a broad range of environmentally sound technologies, and finally its strong track record in reducing GHG emissions cost-effectively from its investments. In fact, GEF's early intervention in many cases – be it demonstrating technologies for landfill gas and coalbed methane utilization or putting policy and regulatory frameworks in place to stimulate investment in renewable energy – has laid the foundation for carbon markets to function and replicate subsequently.

68. Options to be explored by the GEF to support the carbon markets may include: (i) capacity building to help create enabling legal and regulatory environments; (ii) support of programmatic carbon finance and other activities under the post-2012 climate regime; (iii) demonstration of technical and financial viabilities of technologies; (iv) partial risk guarantees and contingent financing for carbon finance projects; and (v) co-financing of innovative projects, with credits to be retained in the recipient country for further project replication. GEF engagement in carbon finance activities will complement other programs and reforms in GEF-5.

69. Finally, the GEF will strive to play a complementary role to the existing climate funds and emerging mechanisms in the post-Copenhagen financial architecture. The GEF has a unique history and rich experience in operating the financial mechanism of the UNFCCC. It has supported enabling activities and climate change mitigation and adaptation projects in more than 150 countries, including extensive engagement with LDCs and a wide range of other developing countries and economies in transition. GEF success in capacity building and technical assistance has often gone hand-in-hand with investment activities. Capacity building alone has often been insufficient to get climate-friendly technologies adopted and disseminated. A more comprehensive approach, including both capacity building and investment in a broach spectrum of activities at various stages of the technology development cycle, has proven to be more robust and effective in deploying and disseminating climate-friendly technologies in the developing world.

Goal and Objectives

70. The overall goal of the GEF in climate change mitigation is to support developing countries and economies in transition toward a low-carbon development path. The long-term impacts of the GEF's work will be slower growth in GHG emissions to the atmosphere from GEF-recipient countries and contribution to the ultimate objective of the UNFCCC, which is to achieve "stabilization of greenhouse gas concentrations in the atmosphere at a level that would

prevent dangerous anthropogenic interference with the climate system." Attempts will be made to promote cross-focal area integration and synergy so as to enhance the cost-effectiveness of GEF investments.

71. The climate change mitigation strategy for GEF-5 will consist of six objectives (see Table 2). The first objective will focus on innovative, emerging low-carbon technologies at the stage of market demonstration or commercialization where technology push is still critical. The second through fifth objectives will focus on technologies that are commercially available but face barriers and require market pull to achieve widespread adoption and diffusion. The last objective is devoted to supporting enabling activities and capacity building under the Convention.

Programming for Replenishment Scenarios

\$4.5 billion replenishment scenario (\$1.6 billion allocated to Climate Change Mitigation)

72. The overall approach is that under the \$4.5 billion replenishment scenario, the focus for Climate Change Mitigation in GEF-5 will generally follow the path of the past 18 years but will be more inclusive than the GEF-4 Climate Change Strategy and will place more emphasis on transformational impacts, programmatic approaches, and sectoral issues. It will respond to the COP decision requesting the GEF to consider long-term implementation of a strategic program on technology transfer, as well as other existing and emerging decisions related to LULUCF, enabling activities, and capacity building. The strategy will largely focus on commercial technologies and cost-effective opportunities to reduce greenhouse gas emissions in GEF-recipient countries through capacity building, technical assistance, as well as investments.

73. Under the \$4.5 billion replenishment scenario, limited opportunities under Objective 1 (demonstration and transfer of innovative low-carbon technologies) will be pursued in a few targeted markets, given the relatively high capital requirements and limited availability of resources to meet competing priorities for the majority of GEF-recipient countries. The proposed budget associated with this objective is \$350 million. GEF investments in programs under Objectives 2-4 (energy efficiency, renewable energy, and sustainable transport) will be expanded and broadened, building on the past success and emerging experience, with more emphasis on programmatic approaches to achieve large-scale tangible results and GHG impact. The proposed budget for each of these objectives is between \$300 million and \$350 million each (see Table 2).

74. The proposed budget for LULUCF (Objective 5) will stand at \$190 million, about half of which will contribute to SFM. Although relatively small compared with other climate change mitigation objectives, this amount in fact represents a significant scale-up from the very modest LULUCF portfolio introduced in GEF-4 in the climate change focal area.

75. For enabling activities and capacity building (Objective 6), the proposed budget is \$110 million. This will cover the cost of preparing National Communications by non-Annex I Parties to the UNFCCC, other enabling activities related to the Convention, and programs to help build the capacity of developing countries to participate in the emerging carbon markets.

76. The expected GHG impact associated with a \$4.5 billion replenishment will be avoidance of 600 million tons of CO_2 equivalent.¹³

\$5.5 billion replenishment scenario (\$1.96 billion allocated to Climate Change Mitigation)

77. Under the \$5.5 billion replenishment scenario, overall funding to Climate Change Mitigation will be increased by 22.5 percent, from \$1.6 billion to \$1.96 billion, compared with the \$4.5 billion replenishment scenario. Such increase will spread across all six objectives. Objective 1 (innovative low-carbon technologies) will see an increase from \$350 million to \$400 million, Objective 2 (energy efficiency) from \$300 million to \$400 million, Objective 3 (renewable energy) from \$350 million to \$420 million, Objective 4 (sustainable transport) from \$300 million to \$350 million, Objective 5 (LULUCF) from \$190 million to \$260 million (including \$110 million contribution to SFM), and Objective 6 (enabling activities and capacity building) from \$110 million to \$130 million.

78. The increased investments in energy efficiency (Objective 2) (\$100 million) will target synergic, cost-effective projects across the Climate Change and Chemicals focal areas in order to maximize climate benefits from ODS phase-out.

79. Although the increase in the investments in innovative low-carbon technologies (Objective 1) will be modest, it will help expand the catalytic and leadership role of the GEF in promoting technology transfer and the development and deployment of emerging technologies.

80. The increased funding for LULUCF will help expand the SFM program, and it will also increase the investments by 50 percent (from \$100 million to \$150 million) in non-SFM carbon stock enhancement programs related to sustainable land management in agriculture and other sectors.

81. Under a \$5.5 billion replenishment scenario, more capacity building activities will be undertaken both under Objective 6 as well as across other objectives. The increased investments will be linked to support the emerging carbon markets, including options discussed earlier.

82. In terms of GHG impact, a \$5.5 billion replenishment is expected to lead to avoidance of 750 million tons of CO_2 equivalent, or an additional 150 million tonnes relative to a \$4.5 billion replenishment (see Table 2).

\$6.5 billion replenishment scenario (\$3.6 billion allocated to Climate Change Mitigation)

83. Under the \$6.5 billion replenishment scenario, allocations to Climate Change Mitigation will increase by 50 percent relative to the \$4.5 billion replenishment scenario, from \$1.6 billion to \$2.4 billion. With these additional resources, the GEF can further scale up its investments across all six objectives and achieve further transformational impact.

84. Resources devoted to the development and transfer of innovative, emerging low-carbon technologies (Objective 1) will be increased to \$500 million. Although such technologies will not lead to large amounts of immediate GHG reductions, they have the potential to make a significant impact in the long run. In the context of the technology development cycle (**Figure**

¹³ All expected GHG reduction figures are associated with funding from Climate Change Mitigation only.

2), projects funded under this objective will focus on the early stages of technology demonstration and deployment rather than the latter stages of technology diffusion. GEF intervention will take a holistic approach, mixing capacity building and technical assistance with limited investments where appropriate.

85. The GEF has been a pioneer in many ways in its support of the demonstration and deployment of innovative low-carbon technologies. The GEF has several portfolios of such projects, mostly developed since the late 1990s, through an operational program to promote "new low-GHG-emitting energy technologies," as well as other operational programs such as sustainable urban transport and renewable energy. These projects aim to support the development, demonstration, and commercialization of pre-commercial or near commercial technologies which have strong potential for achieving global GHG emissions reduction in the future. The technologies supported by the GEF over the years include: concentrating solar power, fuel-cell bus, biomass gasification, micro turbine cogeneration, building integrated photovoltaic power generation, and stationary fuel-cell power production.

86. GEF support in such projects has typically focused on getting the technologies demonstrated and deployed with a view toward commercialization in the future. The GEF undertook the investment risks and financed a large portion of such investments. Because of its unique mandate, the GEF has facilitated the acquisition of experience with these technologies in order to accelerate the reduction of costs of subsequent installations and to generate interest from other financial sources. GEF grants have helped countries avoid their exposure to financial risks prior to the successful testing and subsequent cost reduction of the technologies. This mandate gives the GEF a very unique role in supporting innovative technologies that distinguishes it from other financial institutions.

87. In GEF-5, the GEF will draw lessons learning from the experience of the existing portfolios and place more emphasis on capacity building and technical assistance to facilitate the uptake of innovative, emerging low-carbon technologies. Deployment and transfer of commercially proven technologies may also be covered in countries where limited capacity exists and where significant efforts to adapt the technologies to local circumstances are required. The GEF will make concerted efforts to promote international technology cooperation, North-South and South-South technology transfer, investment in pilot projects, and development and strengthening of local technical and institutional capacity.

88. Under the \$6.5 billion replenishment scenario, synergistic projects and programs will be further expanded, such as linkages between climate and chemicals as well as between climate and the transversal SFM. The proposed budget for energy efficiency will be increased further to \$450 million. This represents a \$150 million increase over the \$4.5 billion scenario, and this increased funding will aim to support cost-effective GHG reduction measures that will promote both energy efficiency and phase-out of ODS that have very high global warming potential. The GEF will promote a transition to low-GHG alternatives to HCFCs and other chemicals, and will encourage synergistic projects with co-benefits of both climate change mitigation and POPs reduction.

89. Furthermore, under the \$6.5 billion replenishment scenario, significantly more investments in renewable energy are expected, from \$350 million (under the \$4.5 billion

scenario) to \$500 million, especially in low-income countries to support not only climate change mitigation but also access to modern energy in poor, rural communities and sustainable development. GEF investments in renewable energy will be boosted particularly in sub-Saharan Africa and South Asia where most people, especially in rural areas, do not have access to electricity and rely on traditional biomass to meet their basic energy needs. GEF investments will also aim to support Small Island Developing States (SIDS) to break away from dependence on imported fossil fuels and move toward an energy structure based on economical, locally available renewable resources. GEF support will cover a wide range of renewable energy technologies, including solar, wind, geothermal, small hydro, methane from waste, and biomass applications for power and heat production. GEF intervention will aim to build the local technical and institutional capacity, create enabling policies and regulations, and shore up investments.

90. With respect to LULUCF (Objective 5), the GEF will scale up its support to promote conservation and enhancement of carbon stocks, both as one of the key objectives of the Climate Change Mitigation Strategy and through the cross-cutting SFM. The proposed budget under Climate Change Mitigation for LULUCF activities is \$410 million (including \$210 million contribution to SFM), more than doubling the level under the \$4.5 billion scenario.

91. Finally, with respect to enabling activities and capacity building (Objective 6), the proposed budget will be increased to \$140 million. In addition to ensuring adequate resources to support non-Annex I Parties to meet their obligations under the Convention, the GEF will stand ready to respond to further guidance from the UNFCCC COP15 and beyond related to enabling activities and capacity building. Furthermore, the GEF will further scale up its support to capacity building in the context of the emerging carbon markets.

92. With a \$6.5 billion replenishment, the expected GHG impact will be avoidance of 1 billion tonnes of CO_2 equivalent, or 400 million tonnes more than a \$4.5 billion replenishment and 250 million tonnes more than a \$5.5 billion replenishment (see Table 2).

93. With respect to the use of the focal area set aside (FAS) under Climate Change Mitigation, the general principle is to target areas and programs which will bring significant transformational impact of global environmental benefits on a global or regional scale, but which will have limited attractiveness for single countries to prioritize for support with their country allocations. For example, establishing and implementing international or regional standardization and certification for energy efficient equipment and products may prove to be an effective measure to promote global market transformation and GHG emissions reduction, but the "global benefits" of such schemes tend to outweigh the "national benefits" to single countries, hence justifying the use of FAS to support such programs.

94. Furthermore, enabling activities related to the fulfillment of obligations of the Climate Change Convention will be supported under the FAS for eligible countries using the expedited process for funding under certain thresholds.

95. The GEF Secretariat will encourage its partner Agencies to discuss project ideas with it early in their development. It is conceivable that a competitive process could be introduced for the use of FAS resources so that the best project ideas will be selected and funded by the GEF.

The GEF Secretariat will play an active role in coordinating with GEF Agencies and other key stakeholders to initiate regional and global initiatives and programs. Furthermore, in order to encourage countries to participate in global and regional projects and programs while maximizing the impact of limited FAS resources, regional and global projects and programs that pool country allocations may be incentivized with FAS resources.

Table 2: Climate Change Mitigation Results Framework

Goal: To support developing countries and economies in transition toward a low-carbon development path **Impacts:** Slower growth in GHG emissions and contribution to the stabilization of GHG concentrations in the atmosphere **Key Indicator:** Tonnes of CO₂ equivalent avoided (both direct and indirect) over the investment or impact period of the projects **Key Target:** 600, 750, 1,000 million tonnes under the \$4.5b, \$5.5b, and \$6.5b scenarios, respectively

Objectives	Key Expected Outcomes	Key Targets under	Key Targets under	Key Targets under	Core Outputs
Tota	al Focal Area Allocation	\$1.6 billion	\$1.96 billion	\$2.4 billion	
Objective 1: Promote the demonstration, deployment, and transfer of innovative low-carbon technologies	 Technologies successfully demonstrated, deployed, and transferred Indicator: Percentage of technology demonstrations reaching its planned goals Enabling policy environment and mechanisms created for technology transfer Indicator: Extent to which policies and mechanisms are adopted for technology transfer (score of 0 to 4) GHG emissions avoided Indicator: Tonnes of CO₂ equivalent 	 \$350 million Demonstration and deployment of 3-4 innovative technologies in 10-15 countries 80% of the projects reaching the planned goals on the ground 20 million tonnes of CO₂ equivalent avoided 	 \$400 million Demonstration and deployment of 4-5 innovative technologies in 15-20 countries 80% of the projects reaching the planned goals on the ground 25 million tonnes of CO₂ equivalent avoided 	 \$500 billion Demonstration and deployment of 5-7 innovative technologies in 20-30 countries 80% of the projects reaching the planned goals on the ground 30 million tonnes of CO₂ equivalent avoided 	 Innovative low-carbon technologies demonstrated and deployed on the ground National strategies for the deployment and commercializati on of innovative low-carbon technologies adopted
Objective 2: Promote market	• Appropriate policy, legal and regulatory frameworks adopted and enforced	\$300 million20-30 countries	\$400 million • 25-35 countries	\$450 million • 30-40 countries	• Energy efficiency policy and
transformation	Indicator: Extent to which EE	adopting EE	adopting EE	adopting policies	regulation in
efficiency in	adopted and enforced (score of 0 to	policies and initiatives	policies and initiatives	• \$2.5 billion	• Investment
industry and	4)	• \$1.6 billion	• \$2.2 billion	investment	mobilized

Objectives	Key Expected Outcomes	Key Targets under	Key Targets under	Key Targets under	Core Outputs
the building sector	 Sustainable financing and delivery mechanisms established and operational Indicator: Volume of investment mobilized GHG emissions avoided Indicator: Tonnes of CO₂ equivalent 	 \$4.5 billion Scenario investment mobilized for EE 150 million tonnes of CO₂ equivalent avoided 	 \$5.5 billion Scenario investment mobilized for EE 10-15 projects linking to ODS and POPs implemented 220 million tonnes of CO₂ equivalent avoided 	 \$6.5 billion Scenario mobilized for EE 15-20 projects linking to ODS and POPs implemented 250 million tonnes of CO₂ equivalent avoided 	• Energy savings achieved
Objective 3: Promote investment in renewable energy technologies	 Favorable policy and regulatory environment created for renewable energy investments Indicator: Extent to which RE policies and regulations are adopted and enforced (score of 0 to 4) Investment in renewable energy technologies increased Indicator: Volume of investment mobilized GHG emissions avoided Indicator: Tonnes of CO₂ equivalent 	 \$350 million 20-30 countries adopting or strengthening RE policies and initiatives \$1.4 billion investment mobilized 0.8 gigawatt new RE capacity installed 80 million tonnes of CO₂ equivalent avoided 	 \$420 million 25-35 countries adopting or strengthening RE policies and initiatives \$1.7 billion investment mobilized 1 gigawatt new RE capacity installed 90 million tonnes of CO₂ equivalent avoided 	 \$500 million 30-40 countries adopting or strengthening RE policies and initiatives \$2 billion investment mobilized 1.3 gigawatt new RE capacity installed 100 million tonnes of CO₂ equivalent avoided 	 Renewable energy policy and regulation in place Renewable energy capacity installed Electricity and heat produced from renewable sources
Objective 4: Promote energy efficient, low- carbon transport and urban systems	 Sustainable transport and urban policy and regulatory frameworks adopted and implemented Indicator: Number of cities adopting sustainable transport and urban policies and regulations 	 \$300 million 30-40 cities adopting low- carbon programs \$1.3 billion investment 	 \$350 million \$35-45 cities adopting low- carbon programs \$1.6 billion investment 	 \$400 million 40-50 cities adopting low- carbon programs \$1.8 billion investment 	 Cities adopting in low-carbon programs Investment mobilized Energy savings achieved

Objectives	Key Expected Outcomes	Key Targets under	Key Targets under	Key Targets under	Core Outputs
	 Increased investment in less- GHG intensive transport and urban systems Indicator: Volume of investment mobilized GHG emissions avoided Indicator: Tonnes of CO₂ equivalent 	 94.3 billion Scenario mobilized 100 million tonnes of CO₂ equivalent avoided 	 s.s binton scenario mobilized 115 million tonnes of CO₂ equivalent avoided 	 billion Scenario mobilized 130 million tonnes of CO₂ equivalent avoided 	
Objective 5: Promote conservation and enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry	 Good management practices in LULUCF adopted both within the forest land and in the wider landscape Indicator: Number of countries adopting good management practices in LULUCF Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland Indicator: Hectares restored GHG emissions avoided and carbon sequestered Indicator: Tonnes of CO₂ equivalent 	 \$190 million (of which \$90 million to SFM) 20-30 countries adopting good management practices and implementing projects 250 million tonnes of CO₂ equivalent avoided 	\$260 million (of which \$110 million to SFM) 25-35 countries adopting good management practices and implementing projects 300 million tonnes of CO ₂ equivalent avoided	\$410 million (of which \$210 million to SFM) 40-50 countries adopting good management practices and implementing projects 490 million tonnes of CO ₂ equivalent avoided	 Carbon stock monitoring systems established Forests and non-forest lands under good management practices
Objective 6: Support	Adequate resources allocated to support enabling activities under the Convention	\$110 million	\$130 million	\$140 million	Countries receiving GEF support for
activities and	Indicator: Percentage of eligible	countries receiving	countries receiving	countries receiving	national

Objectives	Key Expected Outcomes	Key Targets under	Key Targets under	Key Targets under	Core Outputs
		\$4.5 billion Scenario	\$5.5 billion Scenario	\$6.5 billion Scenario	
capacity	countries receiving GEF funding	GEF funding in	GEF funding in	GEF funding in	communication,
the	• Human and institutional	COP guidence	COP guidence	COP guidenee	elc.
Convention	 Futural and institutional capacity of recipient countries strengthened Indicator: Countries and institutions supported by the GEF 		COP guidance	COP guidance	 National communications, etc. completed and submitted to the UNFCCC as appropriate Countries receiving capacity building and project development support for the carbon markets

INTERNATIONAL WATERS

96. Water is the lifeblood of our planet. Human life depends on freshwater, and the Earth's climate and its habitability depend not only on freshwater but also climate services from the ocean. With 70 percent of the Earth being ocean and 60 percent of the land lying in cross-border surface and groundwater basins, most water systems on Earth are transboundary – and thus are at the heart of the GEF International Waters (IW) mandate. These water systems, that know no boundaries, produce food for global trade and domestic use, power industry and economies, quench thirst, and nourish the ecosystems that support life. Globally, these systems are overused, over-polluted, and suffer from serious transboundary and national governance failures.

97. Demands for freshwater continue to rise, resulting in competition among key sectors and ultimately between countries that share transboundary freshwater systems. In parallel, the human demand for protein from marine waters and pollution releases place stress on both coastal and ocean systems, including oceanic fisheries in the middle of oceans, which have been GEF eligible since the 1995 Strategy. The results are all too apparent—depleted and degraded surface waters, aquifers, and marine ecosystems that we see today with adverse impacts on human and ecosystem health, food security, and social stability. In addition, changes in global hydrologic cycles driven by changes in climate and climatic variability deepen poverty, reduce food supplies, damage health and further threaten political and social stability. The impact of melting glaciers alone will be destabilizing. Stopping the loss of the ocean's "blue forests" (which some studies show exceed carbon absorption of the land) is an urgent priority for coastal management to protect these important carbon sinks. Collective action among States is now critical to address multiple stresses on waters, including climatic variability and change before tensions get worse.

98. The GEF serves a unique role in building trust and confidence among States for catalyzing collective management of these large water systems while providing benefits for environment, food production, economic development, community health, and regional stability. The GEF IW focal area has shown that cooperation among States on water, fisheries, and environment serves as a new pathway to secure these benefits for multiple users and that the demonstration of technologies can catalyze investments for real results. The challenges of climatic variability and change add even more urgency to the GEF work on water and oceans.

99. As recommended by OPS-3 in 2005, the time is at hand to scale-up funding in the IW focal area to achieve results before conditions become irreversible. Although not implemented in GEF-4 due to reduced funding to IW compared to GEF-3, GEF-5 presents a crucial opportunity to scale up collective action for freshwater basins, aquifers, and marine systems. Beyond GEF-4 priorities, new imperatives in IW relating to climatic variability and change must be integrated into mainstream work to produce actual results and benefits for communities. Through GEF-supported foundational capacity building over the last decade, many States are now ready to move forward in scaling up demonstrations contributing to MDGs and WSSD targets while incorporating climatic variability and change. Groundwater, accounting for 97% of our planet's unfrozen fresh water, will play a large role and must be sustainably managed. The momentum of state political will for up-scaling globally and GEF's previous experiences with groundwater systems will be lost if replenishment of the IW focal area is inadequate.
Summary of GEF-5 Strategy

100. The GEF-5 strategy for IW follows the successful approach described in the OPS-4 review with progressive programming of GEF resources accompanying progressive multi-state commitments to collective action. This strategy builds on the foundational capacity enhanced and pilot scale work accomplished in GEF-3 and 4, and it proposes to scale-up on-the-ground action given sufficient resources. GEF operations would help catalyze initial implementation of multi-state agreed Strategic Action Programmes with shared visions for specific transboundary surface and groundwater systems or Large Marine Ecosystems, while also incorporating capacity building and knowledge generation to address climatic variability and change and protecting coastal "blue forests" (mangroves, tidal marshes, kelp, sea-grass beds, etc) that are now recognized to be hotspot, globally significant carbon sinks. With greater funding levels, more on-the-ground results would be achieved along with greater likelihood of national and local governance reforms being enacted as part of programmatic approaches in IW. With less funding, fewer results would be catalyzed, and scaling-up for measureable impacts may not be feasible.

101. Concerns of droughts and floods/floodplains would be incorporated into transboundary surface and groundwater basin IW projects through Integrated Water Resources Management (IWRM) approaches that link aquifers and surface water basins. Likewise, for Large Marine Ecosystems (LMEs) and their coasts, concerns related to coastal climatic variability, sea-level rise, ocean warming, protection of "blue forest" carbon sinks, and ecosystem resilience would be incorporated through governance reforms at the LME level, as well as in Integrated Coastal Management (ICM) at local levels. Environmental flows would be addressed where needed. Experiences from previous GEF IW projects show that climatic variability must now be included as a priority transboundary concern, along with other multiple drivers of depletion and degradation to achieve impacts. Two programming objectives are included to accomplish this strategy of moving from planning/confidence-building on collective action to achieving results in GEF-5. Objective 1 relates to transboundary surface water basins and aquifer systems while Objective 2 covers LMEs and their coasts. Objective 2 is globally critical with studies showing marine ecosystems sequestering more carbon than land-based forests and their ability to continue doing so is now at risk and in need of significant investments.

Beyond this focus on implementation of agreed action programmes, a third programming 102. objective relates to requests from States to begin foundational capacity building for new transboundary water systems not yet addressed by GEF. Limited funding would be provided for processes pioneered by GEF to build trust and confidence among States so that they may work together collectively on their transboundary water systems. Modest process-related and capacity building outcomes are generated in these equivalents of enabling activities. Objective 3 covers these "new starts" that are in high demand. Also under Objective 3, experience sharing/learning for the GEF IW portfolio would be enhanced to improve portfolio performance and hasten collective progress. The first real GEF IW program for targeted research would also be funded with quite urgent needs given the new imperative of addressing climatic variability and change in these complex water systems along with other social and institutional issues related to water and oceans. One additional multifocal area objective would be included for the \$5.5 billion replenishment scenario and two for \$6.5 billion: one related to preventing degradation of valuable ocean areas beyond national jurisdictions and the other related to reducing persistent toxic substances impairing hormone functioning. The detailed GEF-5 results framework for the

IW focal area with outcomes, indicators, and targets is included in Table 3 at the end of this section.

Programming for Replenishment Scenarios

103. Depending on replenishment levels, different strategies would be pursued in GEF IW programming. Table 3 illustrates that three IW objectives are proposed for the \$4.5 billion replenishment scenario (\$450 million IW), while 4 objectives are included in the intermediate replenishment scenario (\$550 million IW) and 5 can be proposed for the \$6.5 billion scenario (\$660 million IW). With the \$6.5 billion scenario, the focal area would be able to help more states avoid more conflicts in water use, prevent more water pollution, protect additional aquifers for use in droughts, and introduce more widespread policy, legal and institutional reforms.

104. The scaling up would be especially important for reversing marine habitat degradation and fisheries depletion with investments in alternative livelihoods, land-based pollution reduction, and protection/conservation of "blue forests" habitat and replanting of mangroves for multiple purposes. This scaling-up would include programmatic approaches and multiple GEF focal area collaboration. Innovative partnerships with the business community would be supported both by the focal area and the Earth Fund for broader scale and maximum impact. Adaptive management to incorporate climatic variability and change into integrated approaches for surface, groundwater, and marine ecosystems and management regimes would have a better chance for success with additional funding under higher scenarios. More States would be able to move closer to meeting the relevant WSSD targets for marine fisheries/ ecosystems.

105. With constrained funding, the IW focal area would have to focus on only catalyzing implementation of reforms and modest local demonstrations agreed in the many Strategic Action Programmes that are waiting in line for GEF funding. Additionally, legal and institutional arrangements for joint, ecosystem-based approaches to management would receive attention while incorporating capacity building related to climatic variability and change and groundwater management that would be integrated with surface water concerns. Programmatic approaches would be limited in the \$4 and \$5.5 billion scenarios, with existing ones from GEF 4 as priority for completion and fewer new starts would be possible. Incremental outcomes in the intermediate funding scenario focus on coastal/marine ecosystems in order to make a global impact on rebuilding marine fish stocks and demonstrating conservation/protection of "blue forests".

\$4.5 billion replenishment scenario (\$450 million allocated to the international waters focal area)

106. With the minimal amount of funding included in this replenishment scenario (only marginally more than GEF-3), the IW area will be forced to limit itself to catalyzing initial implementation of the many Strategic Action Programmes that are waiting in line for GEF funding, while incorporating capacity building to address climatic variability and change and integrated groundwater/surface water management in freshwater basins. With less funding to catalyze investments, less on-the-ground impact will be achieved and scaling up of action would be delayed once again until future replenishments. Global impact would necessarily be limited because less available funding would be available to convince States and donors to fund alternative investments. Few programmatic approaches for implementation would be provided for private sector platforms. Fewer new starts would be supported for foundational capacity

building projects requested by States for new transboundary basins, aquifers and LMEs along with minimal funding for the needed targeted research on priority IW concerns.

107. Three core objectives are proposed for this constrained scenario of \$450 million allocation as noted in Table 3. Multiple focal area programmes would not be a priority. No separate objectives are proposed for: (i) improving management to reverse depletion of the ABNJ marine commons - jointly with the biodiversity focal area; or (ii) reducing endocrine disruptors - jointly with Chemicals, although some programming for ABNJ will be needed even with reduced funding to stem accelerated depletion of fisheries. With reduced funding, a focus must be maintained on completing the backlog of requests to initiate implementation of up to 20 agreed Strategic Action Programmes resulting from GEF foundational capacity building and on solidifying legal/institutional arrangements for joint, multi-state commitments to action. Co-financing ratios would be reduced over other replenishment scenarios with little real progress in scaling up on-the-ground results.

\$5.5 billion replenishment scenario (\$550 million allocated to the international waters focal area)

108. In this intermediate replenishment scenario, the IW area will work to catalyze initial implementation of the many agreed Strategic Action Programmes that are waiting in line for GEF implementation funding and will focus on scaling up on-the-ground action for coastal and marine ecosystems. Little additional action could be funded over the minimal replenishment scenario. An exception would be the marine and "blue forests" focus, where GEF funding may be able to have a global impact on rebuilding marine fish stocks toward WSSD targets, reducing land-based pollution, and investing in "blue forests" to protect the ocean's ability to sequester carbon. The marine-related platforms of the Earth Fund would be key contributors to harnessing the commitment of the business community and industry toward sustainability. Beyond the three core focal area objectives, Objective 4 on improving management to reverse depletion of the marine commons known as Areas Beyond National Jurisdiction (ABNJ), would receive minor start-up funding to pilot institutional approaches to prevent the startling depletion and degradation occurring in these ABNJ, deep-sea fisheries, open ocean areas, and seamount habitats. The depleted/degraded status of fish stocks in LMEs and on the high seas, as well as our planet's endangered coastal "blue forests" warrant this additional effort for coastal and marine systems.

109. Understanding and applying adaptive management to incorporate climatic variability and change into integrated approaches for surface, groundwater, and marine ecosystems and their management mechanisms would have a better chance for success with the additional funding under this intermediate scenario compared to the minimal scenario. More States would be able to move closer to meeting the relevant WSSD targets for marine fisheries/ ecosystems and the WSSD target for adopting IWRM principles with this scenario, and the GEF would be able to respond to State requests for assistance for a few more waterbodies over the minimal scenario.

\$6.5 billion replenishment scenario (\$660 million allocated to the international waters focal area)

110. Through GEF foundational projects, 149 states are collaborating on transboundary water systems. This has created a demand for the implementation of some twenty Action Programmes in GEF-5. The \$660 million scenario would allow support for programmatic approaches to scale-up investments and reforms (finally beginning to address OPS-3 recommendations) while

retrofitting the understanding of climatic variability and demonstration-scale action on adaptive management. Concerns of managing floods and droughts would be incorporated through IWRM, while integrating surface water quality and aquifers into sustainable management. This would help fill a gap in meeting the WSSD target for IWRM. Africa and many LDCs would receive priority attention through programmatic approaches for transboundary river and aquifer systems of West Africa and for the Great Lakes Region. For Large Marine Ecosystems and coasts, resilience would be built-in by incorporating fluctuating fisheries, coral reef bleaching, sea-level rise, coastal storm vulnerability, and coastal hypoxia ('dead zones') into strategies for LME governance and Integrated Coastal Management (ICM), which can help states toward the WSSD 2010/2015 marine targets. A much larger focus on securing the planet's "blue forests" for carbon sequestration, reducing coastal flood/storm vulnerability, and community livelihoods/food security would be possible. Greater on-the ground impact would be produced in terms of more significant investment projects for coastal and marine systems, SIDS, stakeholder and Parliamentarian involvement, national and local policy, legal, institutional reforms, and a focus on enforcement of legal regimes. More States could be funded to enact and implement reforms.

111. Integrated projects across focal areas would be pursued through country programming and programmatic approaches to benefit transboundary waters, with a focus on where all significant countries agree to action and to address among others social and gender issues. Specific multi-focal initiatives for the reduction of water pollution from endocrine disruptors (where best practices are needed to minimize pollution and risks) and improved management of marine areas beyond national jurisdiction (overfishing/damaging practices/gear) are examples of such joint GEF approaches across focal areas. The pent-up demand for learning/capacity enhancement in the GEF IW portfolio and targeted/collaborative research to address globally significant issues such as environmental flows or climate impacts on local ocean systems will finally receive needed funding, along with foundational capacity building for States to address new transboundary water systems in IW Objective 3, including new starts (that are more expensive) in order to address post-conflict reconstruction, including trust and capacity building among fragile States.

112. Of critical importance will be new, exciting partnerships with the business community that would be supported both by the focal area and the GEF Earth Fund for maximum impact to underpin Objectives 1 and 2. A "Save the Source" platform with industry on water use efficiency, optimizing supply chains, and water foot-printing; a "Rebuilding Ocean Fish Stock and Biodiversity" platform with banking/fishing/import/export/food industries; a "Revitalizing Dead Zones" platform with agribusiness related to nitrogen pollution; and perhaps a "Sustainable Shipping" platform with the maritime transport industry have the potential to stimulate global impacts. Before it is too late, funding must be devoted to sustaining the capacity of LMEs and their coastal waters to assimilate carbon, and the business community is a key contributor.

113. Table 3 outlines Objectives 4 and 5 that can be pursued with higher levels of funding and cooperation with the BD and Chemicals areas of the GEF. Objective 4 relates to a joint program with GEF-BD to promote effective management of marine Areas Beyond National Jurisdiction (ABNJ), deep-sea fisheries, and open oceans directed at preventing fisheries depletion, reduced by-catch, management regimes, and MPAs. These "international waters" have been eligible in the GEF IW focal area since the 1995 and are rapidly being depleted and degraded. Objective 5

relates to a joint pilot demonstration program with Chemicals to test the effectiveness of policies, innovative instruments, and best practices for reducing releases of persistent toxic substances (PTS), particularly those exhibiting endocrine disruption (dangerous "gender benders" that impair human health). Greater funding would mean greater reduction of human health risks.

Table 3: International Waters Results Framework

Long-term IW Goal: Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services. **Impact:** Multi-state cooperation catalyzed to address concerns of transboundary water systems for most every continent and ocean with special impact on rebuilding marine fish stocks and protecting "blue forests" coastal habitat globally

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
Objective 1:	Outcome 1.1: Implementation of agreed Strategic Action Programmes	\$150 million	\$170 million	\$200 million	
Catalyze multi-state cooperation	(SAPs) incorporates transboundary IWRM principles (including environment and groundwater) and	Co-financing ratio of 1:2	Co-financing ratio of 1:2.5	Co-financing ratio of 1:3	 National and local policy and legal reforms adopted/
to balance conflicting water uses in	policy/ legal/institutional reforms into national/local plans • Indicator 1 1: Adoption or	Multi-state- cooperation results in adoption and/or	Multi-state- cooperation results in adoption and/or	Multi-state- cooperation results in adoption and/or	implemented
trans- boundary surface and groundwater	implementation of national/local reforms; functioning of national inter-ministry committees	implementation of national/local reforms in 50% of States and	implementation of national/local reforms in 50% of States and	implementation of national/local reforms in 60% of States and	• Cooperation frameworks agreed with sustainable financing identified
basins while considering climatic variability and change	 Outcome 1.2: Transboundary institutions for joint ecosystem-based and adaptive management demonstrate sustainability Indicator 1.2: Cooperation 	successful demonstrations in at least 50 % of States in 7-8 transboundary water systems.	successful demonstrations in at least 55 % of States in 8-9 trans- boundary water	successful demonstrations in at least 60 % of States participating in up to 9 transboundary	 Types of technologies and measures
	frameworks adopted and states contribute to financial sustainability Outcome 1.3: Innovative solutions		systems.	water systems.	implemented in local demonstrations and investments
	implemented for reduced pollution, improved water use efficiency, sustainable fisheries with rights-based management, IWRM, water supply protection in SIDS, and aquifer and catchment protection (greater scaling up			Earth Fund water use efficiency platform pilots enhanced results through	• Enhanced capacity for issues of climatic variability and change and

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
	 in \$6.5 Billion scenario) Indicator 1.3: Measurable water-related results from local demonstrations, including community benefits (disaggregated by gender) Outcome 1.4: Climatic variability and change as well as groundwater capacity incorporated into updated SAP to reflect adaptive management. Indicator 1.4: Updated SAP and capacity development surveys 			complementary IW partnership funding	groundwater management
Objective 2: Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change	 Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/ institutional reforms into national/local plans Indicator 2.1: Adoption or implementation of national/local reforms; functioning of national inter-ministry committees; Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability Indicator 2.2: Cooperation frameworks agreed and include sustainable financing 	\$200 million 1:2 co-financing ratio Adoption/ implementation of national/local reforms in 50% of States and demonstrations for at least 50 % of States in 6-8 LMEs	\$240 million 1:2.5 co-financing ratio Adoption/ implementation of national/local reforms in 70% of States and measureable demonstration investment results for at least 50 % of States in 8-9 LMEs.	\$270 million 1:3 co-financing ratio Adoption/ implementation of national/local reforms in 70% of States and measureable demonstration investment results for at least 60 % of States in 9-10 LMEs.	 Agreed commitments to sustainable ICM and LME cooperation frameworks National and local policy/legal/instituti onal reforms adopted/ implemented Types of technologies and measures implemented in

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
	 Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results (greater scaling up in \$5.5 and \$6.5 Billion scenarios for on-the-ground impact) Indicator 2.3: Measurable results for reducing land-based pollution, habitat, and sustainable fisheries from local demonstrations, including community benefits (disaggregated by gender) Outcome 2.4: Climatic variability and change at coasts and in LMEs incorporated into updated SAP to reflect adaptive management and ICM principles (including protection of "blue forests") Indicator 2.4: Updated SAPs and capacity development surveys Outcome 2.5: In \$6.5 billion scenario, major industry partnerships with GEF undertake global action to reduce nutrient pollution and to sustain fisheries. Indicator 2.5: industry codes of conduct/action 	\$4.5 billion Scenario	\$5.5 billion Scenario Earth Fund platforms "Rebuilding Ocean Fish Stocks and Biodiversity"	\$6.5 billion Scenario Earth Fund platforms "Rebuilding Ocean Fish Stocks and Biodiversity" and "Revitalizing Dead Zones" fully funded	 local demonstrations and investments Enhanced capacity for issues of climatic variability and change Industry partnerships with Earth Fund
Objective 3:	Outcome 3.1: Political commitment, shared vision and institutional capacity	\$100 million	*\$125 million	\$125 million	

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
Support	demonstrated for joint, ecosystem-based	Multi-state	Multi-state	Multi-state	National inter-
foundational	management of waterbodies and local	agreement on	agreement on	agreement on	ministry committees
capacity	ICM principles	commitments to	commitments to	commitments to	established; agreed
building,	• Indicators 3.1: Agreed SAPs at	joint, ecosystem-	joint, ecosystem-	joint, ecosystem-	Transboundary
portfolio	ministerial level with considerations	based action for 9-	based action for 10-	based action for 10-	Diagnostic Analyses
learning, and	for climatic variability and change;	10 new water bodies	11 new water bodies	11 new water bodies	& Strategic Action
targeted	functioning national inter-ministry	with modest	with modest	with modest	Programmes; local
research	committees; agreed ICM plans	demonstrations	demonstrations	demonstrations	ICM plans
needs for					
joint,	Outcome 3.2: On-the-ground modest				
ecosystem-	actions implemented in water quality,				Demo-scale local
based	quantity (including basins draining				action implemented,
management	areas of melting ice), fisheries, and				including in basins
of trans-	coastal habitat demonstrations for "blue				with melting ice and
boundary	forests" to protect carbon		85% IW projects	85% IW projects	to restore/protect
water	• Indicator 3.2: Measurable results		demonstrate active	demonstrate active	coastal "blue
systems	contributed at demo scale or		GEF portfolio	GEF portfolio	forests"
	investment scale(for \$6.5 Billion		experience	experience	
	scenario, community benefits		sharing/learning	sharing/learning	
	recorded)				• Active
					experience/sharing/
	Outcome 3.3: IW portfolio				learning practiced in
	performance enhanced from active				the IW portfolio
	learning/KM/experience sharing				
	• Indicator 3.3: GEF 5 performance				
	improved over GEF 4 per data from				Arctic LMEs
	IW Tracking Tool				programmatic
					approach with
	Outcome 3.4: Targeted research				partners.
	networks impact global thinking on at				
	least coral reets (For \$6.5 Billion				
	scenario, nutrient reduction/dead zones				
	and perhaps environmental flows also				
	have global significance).				
	• Indicator 3.4: Coral reef and				

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
	 nutrient reduction research results incorporated into new GEF IW projects Outcome 3.5: Political agreements on Arctic LMEs accompany programmatic approach and help contribute to prevention of further depletion/degradation. Indicator 3.5: agreements signed; AMAP monitoring shows no further depletion/ degradation of the Arctic LMEs. 				
Objective 4: Promote effective management of Marine Areas Beyond National Jurisdiction (ABNJ) directed at preventing fisheries depletion joint with GEF Biodi Focal Area	 Outcome 4.1: ABNJ (including deepsea fisheries, oceans areas, and seamounts) under sustainable management and protection (including biodiversity) Indicator 4.1: Marine Protected Areas (MPAs) sustainably managed; ABNJ demo plans implemented; improved flag and port state enforcement of practices Outcome 4.2: Plans and institutional frameworks for pilot case ABNJ have catalytic effect on global frameworks Indicator 4.2: GEF-piloted ABNJ approaches replicated through global mechanisms 	\$ 0	\$15 million 50 % of demonstrations sustainable within institutions; MPA target in Biodiversity Strategy	\$40 million 70% of demonstrations sustainable within institutions; MPA target in Biodiversity Strategy	• Demonstrations for management measures in ABNJ, (including deep-sea fisheries, ocean areas) with institutions;
Objective 5:	Outcome 5.1: PTS pollution reduction through successful demonstration	\$0	\$0	\$25 million	

Objectives	Expected Outcomes	Key Targets under \$4.5 billion Scenario	Key Targets under \$5.5 billion Scenario	Key Targets under \$6.5 billion Scenario	Core Outputs
Undertake pilot-scale demonstra- tions of pollution reduction from Persistent Toxic Substances (PTS), especially endocrine disruptors joint with Chemicals Focal Area	 technology Indicator 5.1: PTS releases avoided or reduced in pilot projects - Kg PTS Outcome 5.2: Partnerships with industry replicate clean technology to avoid PTS releases Indicator 5.2: Replication strategies implemented 	\$4.5 billion Scenario	\$5.5 billion Scenario	70% of pilots show reduced PTS pollution;	 Partnerships with industry created Types of measures implemented by industry

LAND DEGRADATION

114. Land degradation affects close to 2.6 billion people across more than 100 countries. Degraded land is costly to reclaim and, if severely impacted, result in diminished ecosystem functions which are crucial to the provision of environmental, social, economic and non-material benefits on which society depends, and which keeps development options open. The Millennium Ecosystem Assessment identified three major direct drivers for terrestrial ecosystem degradation: *land use change, natural resources consumption* and *climate change*. These direct drivers are also emphasized in the 10-year strategy of the UNCCD and in the non-legally binding instrument on forests of United Nations Forum on Forests (UNFF). With the current debate on the role of agriculture and forest management in climate change mitigation (LULUCF), there are emerging opportunities also for further enhancing the sustainable land management agenda in the rural landscape.

115. The land degradation focal area embraces the landscape approach by adopting ecosystem principles, such as maintaining and enhancing the connectivity between ecosystems. By adopting an integrated approach to natural resources management (NRM), the land degradation focal area drives an agenda for multiple global environmental benefits, including those related to the protection and sustainable use of biodiversity, climate change mitigation and adaptation and the protection and sustainable use of international waters.

116. The GEF-5 strategy for the land degradation focal area will maintain overall coherence with the GEF-4 strategy and support efforts to remove key barriers to the sustainable management of crop and livestock systems, as well as forest landscapes. More emphasis will be given to the management of competing land uses (e.g. food production, biomass production) since they not only result in changes in land cover and ecosystem dynamics but also contribute to increase the emission of greenhouse gases.

117. By emphasizing the management of natural resources in an integrated way, in support of livelihoods of millions of people, the land degradation strategy has been made fully consistent with the overall approach to natural resources management across the GEF focal areas of biodiversity, climate change mitigation/LULUCF, and international waters. In this regard, joint programming with other focal areas will be actively pursued, especially in the context of integrated watershed management in priority transboundary catchments and groundwater recharge areas (links with the international waters focal area), increasing forest and tree cover in production landscapes (links with the climate change focal area), and implementation of landscape approaches for protected area management (links with the biodiversity focal area).

118. The goal of the land degradation focal areas is to contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation. To achieve this goal, the strategy encompasses four objectives: (i) maintain or improve flow of agroecosystem services to sustaining the livelihoods of local communities; (ii) generate sustainable flows of forest ecosystem services in arid, semi-arid and sub-humid zones, including sustaining livelihoods of forest-dependent people; (iii) reduce pressures on natural resources from competing land uses in the wider landscape; and (iv) increase capacity to apply adaptive management tools in sustainable land management. 119. The proposed enhanced allocations in GEF-5 will allow the GEF to pursue a more strategic and focused approach to investment in sustainable land management (SLM) based on country needs and capacities when compared with the GEF-4 cycle. Programmatic approaches to natural resources would be the appropriate modality to trigger transformational changes in the agricultural and forest sectors and to stronger link GEF investments to large-scale impacts. Countries in which programmatic approaches have been already piloted in earlier replenishment periods, such as China or India, might consolidate and even expand these approaches in GEF-5. Countries involved in regional approaches to sustainable land management, such as TerrAfrica/SIP, MENARID and CACILM might, depending on their country resources allocation, renew or modify their commitment to these programs by emphasizing more on their respective national activities along with corresponding reductions of the regional program elements. This approach would be fully in line with the principles of the resource allocation system, country-driveness and a more efficient and effective allocation of GEF-5 resources.

120. The focal area set-aside (FAS) in the land degradation focal area, i.e., resources not allocated to countries, under a potential expansion of scope of the resource allocation system (RAF/STAR), would help the focal area to: (i) support global scale actions that contribute to overall strategic goals of the GEF; (ii) support the implementation of the Sustainable Forest Management program; (iii) support the objective of increasing capacity to apply adaptive management tools in SLM; and (iv)) create an incentive mechanism for countries to chose a programmatic approach vis-à-vis the business-as-usual project-by-project approach to trigger transformational changes in the agricultural and forest sectors . These resources may be pooled with other incentive-based mechanisms supported through the other focal areas supporting natural resources management in the wider landscape such as biodiversity, climate change/mitigation and international waters.

121. During GEF-3 and GEF-4, investments in the land degradation focal area supported at least 40 of an estimated 100 countries affected globally by land degradation (desertification and deforestation) in implementing SLM policies and practices to generate GEBs. The demand for resources during both replenishment phases far exceeded what was allocated to the focal area, and we expect that countries will increasingly need to address land degradation challenges in the context of agricultural production to meet the need of growing populations. The recent GEF-financed IAASTD¹⁴ noted that increasing rates of land degradation in many regions may limit the ability of agro-ecosystems to provide food security. A likely consequence of this scenario is increased clearance and fragmentation of natural habitats leading to further destabilization of ecosystems, loss of biodiversity, and increased risk of greenhouse gas emissions through deforestation and fires. As we look ahead to GEF-5, it is essential that the GEF strengthen its role as a financing mechanism to help position countries in their effort to address these as fundamental challenges to sustainable development.

122. The GEF will need to strengthen its role in two major ways to effectively combat land degradation, stabilize ecosystem services and reduce livelihood vulnerability of rural populations. First, the GEF must step-up its contribution to country and regional efforts in building effective enabling environments for SLM at multiple scales. An increased allocation will allow the GEF to pursue its mandate of generating GEBs in the context of supporting

¹⁴ International Assessment of Agricultural Knowledge, Science and Technology for Development, 2009 (cosponsored by FAO, UNEP, UNDP, UNESCO, World Bank and WHO)

national and regional development priorities in the coming decade. This will include institutional strengthening in agriculture, rangeland, and forest management, and cross-sector collaboration. Second, the GEF must scale-up its investment through comprehensive and integrated approaches that cover increasingly larger geographical areas. Improved management of agro-ecosystems and forest landscapes over larger geographical areas will safeguard soil and water resources, increase carbon stocks¹⁵ and reduce emissions, and protect biodiversity. In the case of drylands, the large surface area also makes them an important target for carbon storage¹⁶ and sequestration. The benefits of reducing carbon emissions through SLM will help position the GEF to play an influential role in future financing options for climate change mitigation in agriculture.

Programming for Replenishment Scenarios

123. A higher allocation for the land degradation focal area in GEF-5 will enable the GEF to meet the demands for balancing investments in SLM practices with the need for strong enabling environments at national and regional levels. Table 4 summarizes what can be realistically pursued in the GEF-5 strategy based on proposed allocations under the three replenishment scenarios.

\$4.5 to 5.5 billion replenishment scenarios (\$450 million - 550 million allocated to the land degradation focal area)

124. An allocation of \$450-550 million (*potentially leveraging up to \$2 billion*) will allow the GEF to invest in SLM interventions to generate measureable GEBs (improve provisioning of ecosystems services, reduce GHG emissions, and conserve biodiversity) in agro-ecosystems, rangelands, and forest landscapes while providing direct benefits for human livelihoods. However, the projects will mostly target countries that already have or are developing appropriate enabling conditions for SLM and SFM, including policy frameworks, investment strategies, and regulatory mechanisms. The GEF will also help to position such countries for effective implementation of the 10-year UNCCD strategy, scaling-up SLM innovations, and mobilizing baseline knowledge and tracking tools for long-term monitoring and assessment of impacts and trends. Under this scenario, the GEF will catalyze SLM and SFM investments to cover an estimated 500 million hectares of production landscapes, including in drylands and affected transboundary areas, with the potential to benefit one billion smallholder farmers and pastoralists.

\$6.5 billion replenishment scenario (\$660 million allocated to the land degradation focal area)

125. With an additional \$160 million (total \$660 million) allocation under this scenario (*potentially leveraging up to \$2.5 billion*), the GEF will address land degradation challenges in a comprehensive, integrated, and multi-scale fashion to ensure the sustainability of SLM interventions, including support for creating appropriate enabling environments. First, the GEF will expand its focus to include national-level policy frameworks, investment strategies, and regulatory mechanisms for SLM in countries that lack these. This will enable countries to step-

¹⁵ In 2000, the IPCC estimated that feasible improvements in cropland management, grazing land management, agroforestry, and rice systems within existing land uses could increase carbon stocks by 125, 240, 25, and 7 MtC per year by 2010.

¹⁶ The Millennium Ecosystem Assessment (2005) estimated that the total dryland soil organic carbon reserves comprise 27% of the global soil organic carbon reserve.

up efforts to mainstream SLM and SFM as cross-sector opportunities for economic development, including efforts to increase food security and income generation in rural areas. Second, the GEF will specifically target 3-5 major pastoral and rangelands globally for SLM and increased resilience to climate change. Third, the GEF will initiate a program to focus on fragile savannas, a highly overlooked set of priority ecosystems where the risk of degradation and human vulnerability is projected to increase dramatically in the coming decade. GEF investment in the savannas will catalyze integrated natural resource management to maximize delivery of global environmental benefits and improve livelihoods. Under this scenario, GEF will invest in SLM and SFM projects to cover at least 800 million hectares of production landscapes, including in drylands and affected transboundary areas, with potential to benefit 1.5 billion smallholder farmers and pastoralists.

Table 4: Land Degradation Results Framework

Goal: To contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation.

Impacts:

• Sustained productivity of agro-ecosystems and forest landscapes in support of livelihoods

Indicators:

- Change in land productivity (greenness measure as proxy Net Primary Productivity, Rain-Use Efficiency adjusted NDVI)
- Improved livelihoods in rural areas (*Prevalence of underweight children under five years of age as proxy*)
- Value of investment in SLM (*\$ generated from diverse sources, co-financing in projects*)

Objectives	Expected Outcomes	Outcome Targets - \$4.5 Billion Scenario	Outcome Targets - \$5.5 Billion Scenario	Outcome Targets - \$6.5 Billion Scenario	Core Outputs
1. Maintain or improve flow of agro-ecosystem services to sustaining the livelihoods of local communities	Outcome 1.1: An enhanced enabling environment within the agricultural sector. <i>Indicator 1.1 Agricultural</i> <i>policy, legal and regulatory</i> <i>frameworks functioning to</i> <i>support SLM (Score)</i> Outcome 1.2: Improved agricultural management. <i>Indicator 1.2 Land area under</i> <i>effective agricultural, land</i> <i>and water management</i> <i>practices (Hectares by</i> <i>management practice)</i> Outcome 1.3: Functionality and cover of agro-ecosystems maintained <i>Indicator 1.3 Land area under</i> <i>effective management in</i> <i>production systems with</i> <i>improved vegetative cover</i>	\$200 million Allocation Sustainable management of 150 million hectares of crop, livestock and silvo- pastoral landscapes, including in drylands and transboundary areas	\$225 million Allocation Sustainable management of 250 million hectares of crop, livestock and silvo-pastoral landscapes, including in drylands and transboundary areas	\$250 million Allocation 25% of projects target improved agricultural policy, legal, regulatory, institutional, and national investment frameworks for SLM Sustainable management of 350 million hectares of production landscapes, including in drylands and transboundary areas Sustainable management of 3-5 pastoral and rangelands for increased resilience to climate change	Country level policy, legal and regulatory frameworks that integrate SLM principles developed Diverse sources of investment for SLM interventions at multiple scales (e.g. PES) Hectares of tree cover in agro-ecosystems
					Country level policy,

Objectives	Expected Outcomes	Outcome Targets - \$4.5	Outcome Targets - \$5.5	Outcome Targets - \$6.5	Core Outputs
		Billion Scenario	Billion Scenario	Billion Scenario	
2. Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependant people	 2.1: An enhanced enabling environment within the forest sector in drylands. <i>Indicator 2.1</i> Forestry policy, legal and regulatory frameworks functioning to support SFM 2.2: Improved forest management in drylands. <i>Indicator 2.2</i> Land area under effective forest management practices 2.3: Functionality and cover of forest ecosystems in drylands maintained. <i>Indicator 2.3</i> Land area with increased tree cover, increased biomass, and reduced GHG emissions 	\$25 million Allocation Sustainable management of 300,000 hectares of forest production landscapes, including in drylands and transboundary areas	\$50 million Allocation Sustainable management of 500,000 hectares of forest production landscapes, including in drylands and transboundary areas	\$75 million Allocation 25% of SFM projects have effective forest policy, legal and regulatory, and investment frameworks Sustainable management of 1 million hectares of forest production landscapes, including in drylands and transboundary areas	legal and regulatory frameworks that integrate SFM principles developed Diverse sources of investment for SFM interventions (e.g. PES, small credit schemes, voluntary carbon market) Hectares of forest cover in production landscapes
3. Reduce pressures on natural resources from competing land uses in the wider landscape	Outcome 3.1: Enhanced enabling environments between sectors in support of SLM. <i>Indicator 3.1 Demonstration</i> results strengthening enabling environment between sectors (incl. agriculture, forestry) Outcome 3.2: Good management practices in the wider landscape demonstrated and adopted by relevant economic sectors. <i>Indicator 3.2 Area under</i>	\$175 million Allocation Demonstration results support integrated management of 200 million hectares of production systems and	\$220 million Allocation Demonstration results support integrated management of 250 million hectares of production systems and	\$250 million Allocation 25% of SLM projects achieve effective coordination and harmonization among relevant sectors and institutions nationally Demonstration results support integrated management of 350 million hectares of production systems and	Government agencies collaborating on SLM initiatives across sectors and at multiple scales Number and types of investment sources in SLM from successfully tested sustainable finance reflow schemes Information on SLM (wider landscape)

Objectives	Expected Outcomes	Outcome Targets - \$4.5 Billion Scenario	Outcome Targets - \$5.5 Billion Scenario	Outcome Targets - \$6.5 Billion Scenario	Core Outputs
	effective land use management with vegetative cover maintained or increased	natural habitats, including in drylands and transboundary areas	natural habitats, including in drylands and transboundary areas	natural habitats, including in drylands and transboundary areas Demonstration results support integrated management of 100 million hectares of savanna ecosystems	technology and good practices disseminated
4. Increase capacity to apply adaptive management tools in SLM	Outcome 4.1 Increased capacities of countries to fulfill their obligations in accordance with the provisions provided in the UNCCD. Indicator 4.1 Improved quality and timeliness of reporting compliance by countries	\$20 million Allocation 25% of GEF projects financed under Objective 1, Objective 2, and Objective 3 address priorities identified in UNCCD 10-year Strategy and national reporting process	\$20 million Allocation 25% of GEF projects financed under Objective 1, Objective 2, and Objective 3 address priorities identified in UNCCD 10-year Strategy and national reporting process	 \$25 million Allocation 50% of funded countries produce quality reports on time 50% of GEF projects financed under Objective 1, Objective 2, and Objective 3 address priorities identified in UNCCD 10-year Strategy and national reporting process 	Number of countries reporting on UNCCD activities and with improved monitoring of impacts at national level Number of GEF projects financed under LD Objectives 1-3 addressing priorities identified in UNCCD action programs and national reporting
	Outcome 4.2 Improved project performance using new and adapting existing tools and methodologies Indicator 4.2 GEF-6 LD focal area strategy reflects lessons learned, and results of targeted research portfolio and implementation results from earlier replenishment periods (Qualitative score)	50% of GEF projects financed through the LD FA that take up emerging knowledge from targeted research projects or projects with targeted research component	50% of GEF projects financed through the LD FA that take up emerging knowledge from targeted research projects or projects with targeted research component	50% of GEF projects financed through the LD FA that take up emerging knowledge from targeted research projects or projects with targeted research component	process Number of GEF- financed projects reflecting knowledge from targeted research projects or Number of projects with targeted research component Number of GEF- financed projects that

Objectives	Expected Outcomes	Outcome Targets - \$4.5	Outcome Targets - \$5.5	Outcome Targets - \$6.5	Core Outputs
		Billion Scenario	Billion Scenario	Billion Scenario	
					contribute lessons
					learned and results of
					targeted research
Contribution to SFN	Λ	\$30 million	\$35 million	\$60 million	
Total Allocations		\$450 million	\$550 million	\$660 million	

CHEMICALS

126. The chemicals industry is experiencing a shift in the production of chemicals from OECD to non-OECD countries. This increases the stakes and the challenges of managing chemicals safely in the developing world. For example, WHO estimates that about 3% of exposed agricultural workers suffer from an episode of acute pesticide poisoning every year. The overwhelming majority of fatalities take place in developing countries.

127. Chronic effects of exposure to toxic chemicals most often go unreported, particularly in the developing world. Industrial compounds such as methyl-mercury, lead, PCBs, and other neurotoxicants cause neurodevelopment disorder with very serious societal implications: studies in the past decade have shown that low-level prenatal exposure to methyl-mercury is correlated with decreased IQ, leading to downward shift in IQ at the population level. The costs associated with lost productivity due to loss of IQ of children exposed to mercury through seafood consumption of their pregnant mothers were estimated at \$8.7 billion annually in the US. Healthcare costs due to lead poisoning are estimated at \$43 billion per year in the same country.

128. The effects of toxic exposure on wildlife and ecosystems are also well documented, although cause and effect relationships can be difficult to ascertain. For instance, pesticides have been implicated in the decline of amphibians worldwide; DDT metabolites have been known for decades to induce egg-shell thinning and were responsible for the decline of populations of fisheating birds; coral reefs were recently shown to be under threat from pesticides run-off, compounding the effects of climate change.

129. Since the time of the GEF-4 replenishment, the international chemicals agenda has expanded considerably in quantity and scope, requiring an enhanced response from the GEF: the Strategic Approach to International Chemicals Management (SAICM) was adopted in 2006 with the International Conference on Chemicals Management at its second session in May 2009 "urg[ing] the GEF [...] to consider expanding its activities related to the sound management of chemicals to facilitate SAICM implementation [...]"; negotiations for a legally-binding agreement on mercury were launched in 2009; the linkages between the ODS and climate-forcing GHGs have been emphasised; and the synergy process currently taking place within the Stockholm, Rotterdam, and Basel COPs creates demand and opportunity for a more comprehensive approach that extends support beyond persistent organic pollutants (POPs) and ozone depleting substances (ODS).

130. In the field of chemicals, the GEF's mandate as financial mechanism of the Stockholm Convention will require addressing the newly listed chemicals under the Convention. There are complex and challenging issues related to these chemicals throughout their life-cycle and eligible countries will require assistance to address these. This extends to environmentally sound disposal of POPs-containing waste.

131. The GEF will also continue to support cost effective efforts to phase out ozone-depleting substances in countries with economies in transition to meet their Montreal Protocol compliance obligations. With regards to ozone-depleting substances containing waste, efforts to manage these in an environmentally sound way can be supported, in parallel with managing wastes from

other hazardous chemicals and efforts to mitigate climate change. This will ensure considerable synergies.

132. The goal of the GEF's chemicals program is "to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment." This goal is aligned with other internationally agreed goals and objectives, including those of the SAICM, the global chemicals strategy that provides a voluntary policy framework for achieving such a goal. Some funding for the objectives and activities of the SAICM that contribute to global environmental benefits, beyond POPs, would therefore ensure that the GEF can fully maximise the delivery of global environmental benefits from sound chemicals management activities.

133. All of the five main objectives in the SAICM overarching policy strategy, risk reduction, knowledge and information, governance, capacity building, and illegal traffic, include elements that allow for the generation of global environmental benefits. GEF-5 achievements in this regard will be measured in light of the SAICM global priorities as listed in paragraph 8 of the executive summary of the global plan of action.

134. The GEF Instrument provides that "the agreed incremental costs of activities to achieve global environmental benefits concerning chemicals management", as they relate to the GEF focal areas, are eligible for funding. Many substances apart from POPs are of global concern, even if they are not yet covered by global treaties. Mercury releases are relevant to the biodiversity and international waters focal areas, and there are potentials for synergies in relation to greenhouse gas emissions. The positive experiences from GEF's early work before the POPs convention was finalized indicate that early action to build capacity for reducing releases of mercury will also achieve good results.

135. Many of the challenges concerning the management and phase-out of POPs are similar to the steps that countries need to take to comply with the Basel, Bamako and Rotterdam conventions. Sound management of waste will also be needed to address several of the newly listed Stockholm Convention chemicals and will be important in the context of a future mercury convention. Therefore, the existing GEF policy that support to Stockholm Convention and Montreal Protocol implementation should build upon and contribute to strengthening a country's foundational capacities for sound chemical management more generally will be actively pursued so that these activities in support of POPs and ODS are designed to also benefit implementation of the SAICM at the country level, and attainment of the chemicals target of the Johannesburg World Summit.

136. Taking the above into consideration, the GEF will assist countries to address chemicals in an integrated manner in their national planning, and help mobilize other sources of finance for projects and programs for sound chemicals management to achieve global benefits. To achieve this, the three following objectives are proposed for Chemicals under GEF-5 and are detailed in Table 5:

- Phase out POPs and reduce POPs releases;
- Phase out ODS and reduce ODS releases;
- Pilot sound chemicals management and mercury reduction;

Focal Area Set-Aside (FAS)

137. Should Council decide to extend the resource allocation system to the POPs focal area, countries will be able to access the focal area set-aside funds (FAS) to implement enabling activities for an amount up to \$500,000 on an expedited basis, including for support to developing or updating NIPs and national reports.

138. The remaining FAS funds will be used to address supra-national priorities or to incentivize countries to participate in regional or multi-country projects. Projects supported with FAS funds will meet some or all of the following criteria: (i) relevant to the objectives of GEF's strategy for POPs; (ii) support priorities identified by the COP of the Stockholm Convention; (iii) high likelihood that the project will have a broad and positive impact on POPs reduction; (iv) potential for replication; and (v) global demonstration value.

139. Should Council not decide to extend the resource allocation system to the POPs focal areas, enabling activities as well as regional and global projects will continue to be supported as in the past.

Programming for Replenishment Scenarios

140. The resources allocated to a more comprehensive chemicals program should be significantly increased over GEF-4 resources to justify an expansion in scope and not deleverage resources from existing areas. Therefore, activities and outputs are proposed in a modular way until the size of the replenishment for GEF-5 and resources allocated to the chemicals program overall are known.

141. The GEF-5 programming document for consideration of the replenishment participants envisages three scenarios, with envelops for chemicals suggested at the levels of \$450 million, \$550 million, and \$660 million for the \$4.5 billion, \$5.5 billion, and \$6.5 billion scenarios, respectively. Bearing in mind that the final replenishment level and focal area envelope allocations is a decision yet to be taken by the replenishment participants, this section provides an estimate of how the scope and depth of activities is affected by the different funding scenarios.

\$4.5 Billion Replenishment Scenario (\$450 million allocated to chemicals)

142. Under this scenario, it is proposed that the distribution of resources would be as follows:

- POPs: \$410 million;
- Ozone: \$20 million; and
- Support to mercury and sound chemicals management: \$20 million.

143. This represents an increase of 35% compared to the GEF-4 allocation of \$319 million available for programming under the POPs and ozone layer depletion focal areas. The expectation is that demand for POPs resources will be high, as evidenced by the "Needs Assessment" recently conducted under the Stockholm Convention and through the unmet demand for GEF support under GEF-4 apparent in POPs task force discussions. The addition of nine new POPs by the Conference of the Parties (COP) at its last meeting only compels the

argument. Therefore, with a resource envelop of \$450 million, it is expected that most resources would be dedicated to support to the Stockholm Convention and core support to Montreal Protocol, with limited support for mercury and sound chemicals management.

144. Regarding POPs, the GEF would continue its work in support of Convention objectives, in particular PCB phase out and disposal, and removal and disposal of obsolete pesticides. Assuming a comparable level of effort, and based on a crude extrapolation from preliminary figures of anticipated GEF-4 achievements, these efforts would target around 12,000 tons of obsolete pesticides, including POPs pesticides, and 27,000 tons of PCB-related waste and contaminated equipment. As was planned in the GEF-4 strategy, it is expected that the increase of resources would allow for making headway on the reduction of releases of un-intentionally produced dioxins and furans from industrial and non-industrial sources. Capacity would be built at various levels in the context of these efforts, in specific sectors, as well as more generally.

145. The support required for countries to meet their obligations under the Montreal Protocol, in particular as relates to HCFCs, is expected to remain relatively modest. An allocation of \$20 million would allow to continue the work related to HCFCs started under GEF-4. Destruction would not be supported as it is not an obligation for compliance under the Montreal Protocol.

146. A small amount, of \$10 million, would allow funding for assessment-type activities to support the development of the mercury agreement (a number of pilot "country case studies" are envisaged). The small level of resources allocated to sound chemicals management under this replenishment scenario (approximately \$10 million) would be dedicated to incentivising sound chemicals management in GEF projects and programs.

147. Most of GEF support to sound chemicals management would continue indirectly through the GEF strategy, made explicit in the GEF-4 strategic framework, to provide support to Stockholm Convention and Montreal Protocol implementation while building upon and contributing to strengthening a country's foundational capacities for sound chemical management more generally.

\$ 5.5 Billion Replenishment Scenario (\$550 million allocated to chemicals)

148. Under this scenario, it is proposed that the distribution of resources would be as follows:

- POPs: \$460 million;
- Ozone: \$50 million; and
- Support to mercury and sound chemicals management: \$40 million.

149. The additional resources available for POPs would also make it possible to start addressing the challenges posed by the "new" POPs recently added under the control of the Convention.

150. An additional allocation of \$30 million would allow funding for pilot ODS destruction activities, in synergy with POPs and international waters programs. This would complement the support to core compliance obligations provided under the previous scenario.

151. Regarding mercury (approximately \$20 million), it is anticipated that the GEF would support assessment-type activities, as well as demonstrations of good practices for alternatives or mercury release reduction whilst the treaty is negotiated. Such activities would build experience in recipient countries, and prepare the GEF partnership and the international community for implementing the treaty when it is adopted. This is similar to the range of activities that the GEF supported in the years leading to, and during, the negotiations of the Stockholm Convention.

152. To maximize the impact of the relatively modest level of resources allocated to sound chemicals management under this replenishment scenario (approximately \$20 million), it is proposed to dedicate theses resources to incentivising sound chemicals management in GEF projects and programs; for example addressing pesticides runoff to a marine protected area.

<u>\$ 6.5 Billion Replenishment Scenario (\$660 million allocated to chemicals)</u>

153. Under this scenario, it is proposed that the distribution of resources would be as follows:

- POPs: \$510 million;
- Ozone: \$50 million; and
- Support to mercury and sound chemicals management: \$100 million.

154. The level of activities envisaged in support of the Montreal Protocol would be similar to that of the previous scenario. Additional resources available for POPs would increase GEF's impact in this domain.

155. Support to mercury under this scenario (approximately \$30 million) would allow to address additional sectors for demonstration of good practices for alternatives or mercury release reduction priority activities.

156. Regarding sound chemicals management, the level of support under this scenario would permit the implementation of a more ambitious program. In addition to incentivizing sound chemicals management practices in the focal areas as per the previous scenario, support would be provided to the demonstration of release reduction measures targeting specific persistent toxic substances of global concern. Moreover, GEF, in keeping with its mandate, would support some of the SAICM priority "work areas" and activities that generate global environmental benefits. Significantly, the SAICM Global Plan of Action highlights "global priorities", including risk reduction from mercury and other chemicals of global concern; hazardous waste reduction; illegal traffic; and contaminated sites (paragraph 8 of the executive summary of the global plan of action).

Table 5: Chemicals Results Framework

Goal: To promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment

Impacts: Expected Impact: Reduction in the exposure to Persistent Organic Pollutants and other Persistent Toxic Substances of humans and wildlife

Indicator: Levels of POPs in the environment as determined by the Global Monitoring Program under the Stockholm Convention

Objectives	Expected Outcomes	Outcome Targets*	Outcome Targets*	Outcome Targets*	Core Outputs
		54.5 Dillon Scenario	5.5 Dillon Scenario	so.5 Dimon Scenario	
Total Allocation		\$450 million	\$550 million	\$660 million	
Objective 1		\$410 million	\$460 million	\$510 million	
Phase out POPs					
and reduce POPs releases	Outcome 1.1 Production and use of controlled POPs chemicals phased out. <i>Indicator 1.1 Amount of POPs not</i> <i>produced or used following</i> <i>demonstration of alternative;</i> <i>measured in tons per year against</i> <i>baseline as recorded through the</i> <i>POPs tracking tool.</i>		At least 10 countries implement pilot "new" POPs reduction activities.	At least 12 countries implement pilot "new" POPs reduction activities.	
	Outcome 1.2 Exempted POPs chemicals used in an environmentally sound manner. Indicator 1.2 Number of countries managing the use of exempted POPs in an environmentally sound manner.				
	Outcome 1.3 POPs releases to the environment reduced. Indicator 1.3 Amount of un- intentionally produced POPs releases avoided or reduced from industrial	Dioxin reduction plans under implementation in at least 27 country	Dioxin reduction plans under implementation in at least 27 country	Dioxin reduction plans under implementation in at least 30 country	Dioxin action plans under implementation.

Objectives	Expected Outcomes	Outcome Targets* \$4.5 billion Scenario	Outcome Targets* \$5.5 billion Scenario	Outcome Targets* \$6.5 billion Scenario	Core Outputs
	and non-industrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool.	sectors.	sectors.	sectors.	
	Outcome 1.4 POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner. Indicator 1.4.1 Amount of PCBs and PCB-related wastes disposed of, or decontaminated; measured in tons as recorded in the POPs tracking tool. Indicator 1.4.2 Amount of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons.	27,000 tons of PCBs and PCB- related wastes disposed of, or decontaminated. 12,000 tons of obsolete pesticides, including POPs, disposed of in an environmentally sound manner.	27,000 tons of PCBs and PCB- related wastes disposed of, or decontaminated. 12,000 tons of obsolete pesticides, including POPs, disposed of in an environmentally sound manner.	30,000 tons of PCBs and PCB- related wastes disposed of, or decontaminated. 15,000 tons of obsolete pesticides, including POPs, disposed of in an environmentally sound manner.	PCB management plans under implementation.
	Outcome 1.5 Country capacity built to effectively phase out and reduce releases of POPs. Indicator 1.5.1 Progress in development or update of NIPs as recorded through the POPs tracking tool. Indicator 1.5.2 Progress in developing and implementing a legislative and regulatory framework for environmentally sound management of POPs, and for the sound management of chemicals in general, as recorded in the POPs tracking tool.	At least 50 countries receive support for NIP update.	At least 50 countries receive support for NIP update.	At least 50 countries receive support for NIP update.	NIPs prepared or updated, or national implications of new POPs assessed.

Objectives	Expected Outcomes	Outcome Targets*	Outcome Targets*	Outcome Targets*	Core Outputs
		\$4.5 billion Scenario	\$5.5 billion Scenario	\$6.5 billion Scenario	
Objective 2		\$20 million	\$50 million	\$50 million	
Phase out ODS and					
reduce ODS	Outcome 2.1 Country capacity built to	80 % of GEF	80 % of GEF	80 % of GEF	Country annual
releases	meet Montreal protocol obligations and effectively phase out and reduce releases of ODS. Indicator 2.1 GEF-supported countries meet their reporting obligations under the Montreal Protocol, as recorded by	supported countries meet their reporting obligations under the Montreal Protocol.	supported countries meet their reporting obligations under the Montreal Protocol.	supported countries meet their reporting obligations under the Montreal Protocol.	reports to the Ozone secretariat.
	the Ozone Secretariat.		Pilot destruction activities.	Pilot destruction activities.	
	Outcome 2.2 ODS phased out and their releases reduced in a sustainable manner. Indicator 2.2 Amount of HCFCs phased out from consumption or production, measured as ODP tons against baseline.				HCFCs phase out plans under implementation.
Objective 3		\$20 million	\$40 million	\$100 million	-
Pilot sound					Development
chemicals management and mercury reduction	Outcome 3.1 Country capacity built to effectively manage mercury in priority sectors. Indicator 3.1 Countries implement pilot mercury management and reduction activities.	Mercury "country case studies" in at least 12 countries.	Mercury "country case studies" in at least 12 countries. At least 5 countries address mercury on a pilot basis.	Mercury "country case studies" in at least 12 countries. At least 10 countries address mercury on a pilot basis.	and implementation of management plans for persistent toxic substances and other chemicals of global concern, in particular with respect to mercury, on a pilot basis.

Objectives	Expected Outcomes	Outcome Targets* \$4.5 billion Scenario	Outcome Targets* \$5.5 billion Scenario	Outcome Targets* \$6.5 billion Scenario	Core Outputs
	Outcome 3.2 Contribute to the overall objective of the SAICM of achieving the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the environment. <i>Indicator 3.2 Countries implement</i> <i>SAICM relevant activities that</i> <i>generate global environmental benefits</i> <i>and report to the International</i> <i>Conference on Chemicals</i> <i>Management</i>	At least 5 GEF projects receive support for enhanced sound chemicals management.	At least 10 GEF projects receive support for enhanced sound chemicals management.	At least 10 GEF projects receive support for enhanced sound chemicals management. At least 20 countries implement sound chemicals management activities for global benefits; particularly targeting PTS of global concern.	BAT/BEP demonstrated in priority sectors for release reduction of PTS and other chemicals of global concern, in particular mercury.

* The GEF's Chemicals program is relatively new and evolving. It is therefore difficult to predict outcome targets based on past achievements. The quantitative targets in the above logframe must therefore be seen as tentative and indicative only, and are based on the assumption that country priorities and resource utilization patterns will not be very dissimilar under GEF-5 compared to GEF-4.

SUSTAINABLE FOREST MANAGEMENT (SFM) AND LAND USE, LAND-USE CHANGE AND FORESTRY (LULUCF)

157. Forest ecosystems provide a variety of benefits which are realized at the global, subregional, national and local scales. Threats to forest ecosystems are also multiple – ranging from the impacts of climate change to all aspects of competing land uses that lead to forest degradation and deforestation. On a global scale, deforestation contributes to 17.4% of greenhouse gas (GHG) emissions, which is more than the entire transport sector. The importance of forests in the global carbon equation has prompted significant policy discussions on the now-called REDD+ framework (which expands from the framework of Reducing Emissions from Deforestation and Degradation to include forest restoration, rehabilitation, sustainable forest management, afforestation and reforestation). As importantly, forests harbor a significant fraction of the world's biological wealth and are responsible for the provision of key ecosystem services, including functioning as carbon sinks and storehouses, as well as sustaining the livelihoods of hundreds of millions of rural people everywhere.

158. Drawing on these inter-linkages proactively, GEF-4 introduced a more strategic approach to SFM, which includes the role of forests in climate change mitigation under the LULUCF (Land Use, Land Use Change and Forestry) framework. The GEF-4 strategy was operationalized through a SFM program which has rapidly emerged as a diverse portfolio of investments that address individual GEF focal area aspects of forests or emphasize the multiple benefits character of forest ecosystems through major programmatic approaches. All types of forests have been made eligible for funding under the SFM program, ranging from tropical and sub-tropical forests to woodlands and trees in the wider landscape. The portfolio contains a wide spectrum of SFM management tools that are promoted through GEF projects, such as protected area management, integrated watershed management, certification of timber and non-timber forest products or payments for ecosystem services (PES) schemes. Seeking to address potential trade-offs, the strategy does not support the substitution of native forests with plantations, regardless of whether benefits in carbon sequestration would be anticipated.

159. Tropical forests have emerged as a particularly important theme for the global environment. The conversion and degradation of tropical forests, which accounts for approximately 90% of the total GHG emissions from deforestation and for nearly 80% of the threats to biodiversity globally, has been made the focus of an innovative experiment conducted in the ambit of the GEF-4 SFM program. Through this initiative, countries were incentivized to invest portions of their allocations from different focal areas in more impactful sets of SFM and LULUCF activities. This mechanism became known as the Tropical Forest Account (TFA).

160. Three regions of large, intact, tropical forest (Amazonia, Congo Basin, and New Guinea/Borneo) were defined as the initial targets for the TFA. Although the countries spanning these regions also contain 68% of tropical forest carbon, they are programmed to receive only 18% of climate change RAF funding in GEF-4. The TFA incentive mechanism was resourced by reserving portions of the Focal Area Set-aside (FAS) windows of biodiversity and climate change, complemented by land degradation resources, and directed to SFM activities. As a

component of the SFM program, TFA programming could reach \$60 million by the end of GEF-4, leveraging three times as much in co-financing.

161. The investment strategy in SFM for GEF-5 will build on the very promising experience with the SFM portfolio development gained in GEF-4, including the TFA, which in total has allocated approximately \$350 million. The GEF-5 strategy will expand geographically and financially the incentive mechanism pioneered under the TFA, also making use of the latest developments in new and innovative financing opportunities for LULUCF, so as to address all types of forests, and also support the commitment of countries in their efforts to prepare REDD+ plans. There is a growing consensus on the need for global environmental institutions to create or strengthen their investment instruments to decisively in this area, and the GEF is pre-adapted to play a key role in this agenda.

162. The renewed investment scheme for GEF-5 is open to all forest countries and designed to provide incentives for the emergence of more impactful SFM/LULUCF projects and programs, as well as respond to countries' REDD+ plans. These incentives are intended to leverage contributions and foster convergence of investments from GEF-5 STAR balances in biodiversity, climate change and land degradation directed towards forest activities, with the aim of achieving multiple benefits under more cost-effective strategies.

163. The GEF-5 approach will mirror the guidance coming from the other three conventions dealing with forests, and for which the GEF is a financial mechanism (UNFCCC, CBD and UNCCD), and reflect the evolving consensus around the SFM concept, as adopted by the Collaborative Partnership on Forests (CPF) and stated in the non-legally binding instrument on all types of forests (NLBI) of the United Nations Forum on Forests (UNFF). The approach recognizes SFM as encompassing seven thematic elements: extent of forest resources, biological diversity, forest health and vitality, productive functions of forests, protective functions of forests, socioeconomic functions, and the legal, policy and institutional framework. This broadly defined approach can be applied from production forests, including planted forests, all the way to protected forests and to degraded forests in need of restoration.

164. In its fifth replenishment cycle, the GEF will particularly strengthen its SFM efforts in the field of climate change mitigation in order to take advantage of the priority and opportunities being opened for forests in the international agenda during the next 4-6 years. The overall goal for GEF-5 investment in SFM is to achieve multiple global environmental benefits from the management of all types of forests and strengthen sustainable livelihoods for people dependent on forest resources. The GEF-5 strategy identifies two objectives that will drive the SFM portfolio and contribute to reach that goal:

- (f) Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services; and
- (g) Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities.

165. The funding envelope for SFM/LULUCF in GEF-5 can reach between \$183-222 million in the lower scenarios, up to \$400 million depending on the overall replenishment level of the

GEF in this next cycle. This investment will be used as an incentive to coalesce and augment multi-sectoral investments in transformative initiatives in forests, which in turn will be identified and proposed by countries through the voluntary national GEF business plans. In GEF-5, the financially and geographically expanded SFM/LULUCF program will be established as a major incentive mechanism for countries to invest resources from biodiversity, climate change, land degradation and, when appropriate, from international waters (transboundary watersheds) towards integrated programmatic approaches seeking transformative change in forest management and conservation, both nationally and regionally.

166. The GEF has a significant comparative advantage in directing the investments that support measures to control and prevent deforestation and forest degradation as essential and cost-effective means to deliver multiple global environmental benefits, including the protection of forest habitats, forest ecosystem services, mitigation of climate change and protection of international waters, reflecting the transversal nature of forests globally. The GEF-5 strategy will better reflect these key synergies, working with and supporting the NLBI framework on all types of forests of the UNFF, which calls for international cooperation and national action to reduce deforestation, prevent forest degradation, promote sustainable livelihoods and reduce poverty for all forest-dependent peoples.

Programming for SFM and LULUCF under Proposed Replenishment Scenarios

167. Investments by the GEF in Sustainable Forest Management (SFM) and Land Use, Land-Use Change and Forestry (LULUCF) are rapidly gaining momentum with developing countries due to their unique potential to generate global environmental benefits across a range of themes, including carbon sequestration and storage, biodiversity conservation, protection against soil erosion and desertification, together with the provision of freshwater resources. For the next replenishment, a significant expansion of the GEF SFM program is being proposed, particularly in the form of an incentive mechanism for beneficiary countries. The purpose of this cross-cutting mechanism is to make available matching funding targeting SFM and LULUCF tools and activities, thereby encouraging developing countries to program substantial fractions of their focal area allocations in biodiversity, climate change, and land degradation to programs and projects toward seeking multiple benefits that can be accrued from managing forests sustainably. The impact of the proposed SFM incentive mechanism is, however, dependent on the overall replenishment for GEF-5.

\$4.5 and 5.5 billion replenishment scenarios (\$183 million - 222 million allocated to the SFM/LULUCF Program)

168. A \$183-222 million funding envelope for SFM would allow the GEF to take its financing efforts in GEF-4 to scale. Based on our previous experience, developing countries would be forthcoming with an estimated 15% of their national allocations to activities related to SFM and LULUCF. Thus, together with this range of resources originating from the incentive mechanism, the total GEF investment in SFM and LULUCF for GEF-5 could be approaching \$700-800 million by the end of the next funding cycle, before confinancing leveraging is considered. Under this scenario, the GEF will continue to program the bulk of its SFM resources to improve management practices within the forest sector. A significant change under this scenario

compared to GEF-4 will be an enhanced focus on SFM activities aiming at climate change mitigation, as expressed by the second objective of the GEF-5 SFM strategy.

169. Using the OSIRIS¹⁷ model, this first funding scenario holds the potential to reduce deforestation of globally irreplaceable sites in biodiversity hotspot regions by about 1 million hectares over the duration of the fifth replenishment period, and prevent the emission of about 400-750 million tons of carbon dioxide equivalent to the atmosphere. Furthermore, the model calculates that a targeted investment in SFM could produce a measurable reduction in the rates of extinction of key indicator groups globally throughout the duration of the cycle.

170. While these figures are impressive, investments at this scale are not reflective of the priority and opportunities being opened for forests in the international agenda over the course of GEF-5. Furthermore, the window of opportunity to act cost-effectively on the forest agenda is closing rapidly, as pressure from other sectors over forested land is expanding globally. Irrespective of the outcome of the UNFCCC COP 15 negotiations on Reducing Emissions from Deforestation and Degradation (REDD), proposed as a means to protect carbon stocks in forests, it will take time to operationalize whatever framework emerges from that process. GEF, on the other hand, is already in a strategic position to be able to rapidly combine strategic objectives and financial contributions across different focal areas, building on LULUCF and REDD options, maximizing the generation of multiple global environmental benefits. However, given that the estimated annual costs for halving greenhouse gas emissions from deforestation are estimated to range between \$10 billion and \$25 billion, GEF financing for SFM in under this scenario still falls short of the level needed to enable these new strategies to start promoting transformational change in forest practices in a significant number of developing countries.

\$6.5 billion replenishment scenario (\$400 million allocated to the SFM/LULUCF Program)

171. An incentive mechanism of \$400 million for SFM under the mid-level scenario (\$6.5 billion) is expected to mobilize over \$1 billion in focal area allocations before cofinancing is considered. This level of financing will introduce a key outcome on forest law enforcement and governance (FLEG) into the GEF SFM strategy. Therefore, illegal logging, unsustainable trade and lack of adequate forest governance provisions, which in the long haul undermine investments in SFM, will be tackled more effectively than in the lower-level scenario. An investment of \$1.4 billion in SFM has potential to avoid deforestation and forest degradation during the period of GEF-5 by 1.7 million hectares, thereby preventing the emission of 0.8-1.2 billion tons of carbon dioxide to the atmosphere between 2010 and 2014. It is also calculated that this investment could significantly lower the predicted rate of extinctions of forest-dependent species. Estimating that GEF funding of \$1.4 billion will leverage about \$4 billion in cofinancing, the GEF has also considerable potential to become an important funding source under a future REDD mechanism. These expected outcomes would be unprecedented in international financing for forests, in particular by generating multiple global environmental benefits.

¹⁷ The Open Source Impacts of REDD Incentive Spreadsheet (OSIRIS) is a tool to allow users to compare the potential impacts of REDD financing on emissions reduction. http://www.conservation.org/osiris/Pages/overview.aspx

Table 6: Sustainable Forest Management Results Framework

Goal: Achieve multiple environmental benefits from improved management of all types of forests.

Impacts:

Effective provisioning of forest ecosystem services.

Strengthened livelihoods of people dependent on the use of forest resources.

Indicators:

Land (hectares) covered by intact forest.

Carbon stored in forest ecosystems and emissions avoided from deforestation and forest degradation. Income generated from forest services for forest dependent people and communities.

Proposed Resource Envelopes: \$183 million (\$4.5 billion scenario), 222 million (5.5 billion scenario and \$400 million (6.5 billion scenario)

Objectives	Expected Outcomes and Indicators	Outcome targets under \$4.5 billion Scenario	Outcome targets under \$5.5 billion Scenario	Outcome targets under \$6.5 billion Scenario	Core Outputs
Objective 1: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services	Outcome 1.1: Enhanced enabling environment within the forest sector and across sectors. Indicator: Effectiveness of policy, legal and regulatory frameworks that integrate SFM principles (score as recorded by tracking tool). Outcome 1.2: Good	80% of projects have effective forest policy, legal and regulatory frameworks which support SFM.	80% of projects have effective forest policy, legal and regulatory frameworks which support SFM.	80% of projects have effective forest policy, legal and regulatory frameworks which support SFM.	Payment for ecosystem services (PES) systems established (number). Types of services generated from forests
	management practices developed and applied in existing forests. Indicator 1: Forest area under FSC certification measured in hectares. Indicator 2: Enhanced carbon	90 % of projects lead to an increase in forest area under sustainable forest management (including forest conservation).	90 % of projects lead to an increase in forest area under sustainable forest management (including forest conservation).	90 % of projects lead to an increase in forest area under sustainable forest management (including forest conservation).	Forest area (hectares) under sustainable management, separated by forest type

Objectives	Expected Outcomes and Indicators	Outcome targets under \$4.5 billion Scenario	Outcome targets under \$5.5 billion Scenario	Outcome targets under \$6.5 billion Scenario	Core Outputs
	sinks from reduced forest degradation. Outcome 1.3: Good management practices in the wider forest landscape developed and adopted by relevant economic sectors. Indicator: Maintained frontiers between agricultural and forest land (GIS map).	prevent the emission of about 100-250 million tons of carbon dioxide.	prevent the emission of about 120-300 million tons of carbon dioxide.	prevent the emission of about 250-500 million tons of carbon dioxide.	
Objective 2: Strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities.	Outcome 2.1: Enhanced institutional capacity to account for GHG emission reduction and increase in carbon stocks. <i>Indicator: National</i> <i>institutions certifying carbon</i> <i>credits.</i> Outcome 2.2: New revenue for SFM created through engaging in the carbon market. <i>Indicator: Total revenue from</i> <i>carbon market (\$ at country</i> <i>level).</i>	 75 % of projects achieve their targets for enhancing country capacity to certify forest-derived carbon credits. 80 % of projects achieve their targets for carbon revenue generated. prevent the emission of 250-500 million tons of carbon dioxide. 	 75 % of projects achieve their targets for enhancing country capacity to certify forest-derived carbon credits. 80 % of projects achieve their targets for carbon revenue generated. prevent the emission of 300-600 million tons of carbon dioxide. 	 75 % of projects achieve their targets for enhancing country capacity to certify forest-derived carbon credits. 80 % of projects achieve their targets for carbon revenue generated. prevent the emission of 500-800 million tons of carbon dioxide. 	National forest carbon monitoring systems in place (number). Innovative financing mechanisms established (number). Carbon credits generated (number).

AN APPROACH TO ENHANCE ENGAGEMENT WITH THE PRIVATE SECTOR

172. Since its inception in 1991, the GEF has engaged the private sector in a variety of ways, mostly through direct project support. A consistent theme in the numerous policy documents and assessments of GEF's engagement with the private sector is that the private sector is integral to achieving the overall global environmental objectives of the GEF. Given the huge innovative and resource mobilizing potential of the private sector and the limited resources that can realistically be deployed from the public sector in relation to the scale of the challenges, it is generally agreed that ways must be found to radically increase the beneficial involvement of the private sector towards addressing today's and tomorrow's global environmental challenges.

173. Initial policy frameworks for private sector engagement were developed through GEF Council papers as early as 1996.¹⁸ These have provided a foundation for GEF engagement with the private sector. Most recently, two Council-approved documents detailed an updated strategy to enhance GEF's engagement with the private sector: "*GEF Strategy to Enhance Engagement with the Private Sector*" (GEF/C.28/14) in March 2006, which was accompanied by an extensive information document "Additional Information to Support the GEF Strategy to Enhance Engagement with the Private Sector" (GEF/C.28/Inf.4).

The GEF Earth Fund (Pilot Project)

174. The 2006 private sector strategy documents included an innovative proposal to establish a pilot public-private partnership (PPP) initiative to enhance GEF engagement with the private sector. Private sector engagement outside of the resource allocation system is proposed, given the increased difficulty in inducing countries to allocate resources to promote private sector engagement since the RAF was operationalized. A pilot PPP concept was approved by the GEF Council in June 2007 along with a funding allocation of \$50 million. After detailed negotiations with the IFC as a strategic partner, the concept was further developed as a pilot project, was renamed the GEF Earth Fund, and was approved by Council in May 2008.¹⁹

175. The GEF Earth Fund (pilot project) is a vehicle for enhancing GEF engagement with the private sector through a matching of GEF resources with private sector resources to catalyze the sustainable generation of global environmental benefits. Its primary role is to mobilize private capital into projects, technologies and business models that will contribute to the protection of the global environment and to thereby promote environmentally sound and sustainable economic development.

¹⁸ GEF Strategy for Engaging the Private Sector (1996); Engaging the Private Sector in GEF Activities (1999); Enhancing GEF's Engagement with the Private Sector (2003); Principles for Engaging the Private Sector (2004)

¹⁹ The GEF Earth Fund was established as a result of two Council documents, "*The Public Private Partnership Initiative: Furthering the GEF Strategy to Enhance Engagement with the Private Sector*", approved by the Council in June 2007, and "*The GEF Earth Fund: (formerly) The Public Private Partnership Initiative: Furthering the GEF Strategy to Enhance Engagement with the Private Sector*", approved by circulation to Council in May 2008

176. The Earth Fund allows the GEF to demonstrate ways to more systematically engage with the private sector outside of the constraints of the resource allocation system in order to reach beyond its traditional boundaries, foster innovation, open and develop new markets, and demonstrate the potential for strategic partnerships to achieve a greater scale of investment than generally achievable through the normal GEF project cycle. Private sector engagement will also continue outside of the Earth Fund through implementation of the GEF focal area strategies. Indicative private sector engagement outcomes for GEF-5 are shown in Annex 2, which is not limited to proposed activities within the Earth Fund.

177. <u>Earth Fund Platforms</u>. The Earth Fund is structured based on the concept of "Platforms" under which a portfolio of individual activities (hereinafter referred to as "projects") will be managed. The overarching goals of each Platform have to be aligned with GEF focal area strategies, while projects within each Platform will seek to address specific environmental challenges or to leverage particular business models or financial instruments in service of these objectives. This is a delegated structure that allows projects to be approved by GEF Agencies that manage Platforms, once those Platforms have been approved by Council.²⁰

178. Council has to date approved \$40 million out of the existing \$50 million GEF funding allocation (excluding Agency fees) for three Earth Fund Platforms: (i) the IFC Earth Fund Platform (\$30 million, September 2008); (ii) the UNEP "Global Market Transformation for Efficient Lighting" (\$5 million, June 2009); and (iii) the WB/Conservation International "Conservation Agreement Private Partnership Platform" (\$5 million, August 2009). Other promising Platform proposals are in active preparation and will quickly utilize the remaining \$10 million (subject to Council approval).

179. The geographic focus for Earth Fund Platforms is global or regional. It is not anticipated that any Platforms will be confined to a single country. Sub-projects within Platforms will likely be single country investments.²¹ Attention will be given to ensuring complementarity between the Earth Fund and other GEF programming, and some specific examples in this regard are provided later in this document (in relation to the international waters focal area). A single Earth Fund Platform may encompass more than one GEF focal area, and this is already the case in two of the three Platforms approved by Council thus far.

180. The Secretariat believes that the recent Council approval of the Conservation Agreement Private Partnership Platform only 6 months after the proposal first entered the GEF pipeline is some evidence that a real step change in the processing timescale is feasible through the Earth Fund. Given the increasing urgency of the issues confronting the global environment and the

²⁰ Within each Platform, projects are approved through approved operational procedures (submitted to Council with each Platform proposal) which normally allow these projects to be approved consistent with the project cycle of the Agency itself.

²¹ While single country Platforms could in theory be considered, there is less of a case for the additionality of the Earth Fund and there is also the issue of potential interaction with national planning processes which typically operate on a different timescale from the expedited Earth Fund processes. A strong specific justification would be needed for a national Platform. It is proposed that private sector involvement by national entities be encouraged through a separate non-grant instrument incentive in addition to the country allocations where relevant (see Annex 1 to this document).
pace at which the private sector operates, we believe that this faster rate of GEF platform processing is welcome.

181. The IFC also manages the trust fund for the GEF Earth Fund (pilot project), and in its role as fund manager and administrator, the IFC disburses funding to entities approved to manage Platforms upon Council approval and CEO endorsement. In addition, the IFC participates in GEF Earth Fund Board meetings as an observer.

182. Further information regarding the GEF Earth Fund is provided in the document "*The GEF Earth Fund Board Procedures (Pilot Project) – Strategic Priorities, Governance and Operational Procedures,*" which was approved by Council in June 2009.

Rationale for Enlarging and Mainstreaming the GEF Earth Fund in GEF-5

183. The approved and currently pending Earth Fund Platforms are expected to cover a wide range of operations in climate change, biodiversity and regional water initiatives, including investment into small and medium sized enterprises (SMEs) in developing countries in a manner which combines environmental protection and social and economic development. The Platforms will cover a wide geographic distribution in LDCs and other recipient countries. The streamlined process already has been seen to work effectively and to be of great interest to potential private sector partners wishing to participate in Platforms.

184. However, due to the limited size of the initial funding approval (\$50 million), some of the current Platforms may of necessity be smaller than might be considered optimal by many potential private sector partners, and smaller than might be justifiable to optimize the regional and global impacts of some of the relevant initiatives. This is of course quite appropriate for a pilot project, when it is clearly desirable to demonstrate the effectiveness of a number of different initiatives and approaches.

185. There is justification for enlarging and consolidating the GEF Earth Fund as a mechanism for engaging with the private sector in GEF-5 for the following reasons:

- (a) Allow for the approval of quality Platforms, such as those to date under the pilot project of the GEF Earth Fund, which will reinforce the widely perceived effectiveness of the portfolio approach executed through managed Platforms;
- (b) Provide for interventions of larger scale and greater speed of implementation (attainable through strategic partnerships with the private sector using a streamlined portfolio-based approach), which are desirable to enhance the GEF's impact towards the protection of the global environment and environmentally sound and sustainable economic development, given the urgent need to address large scale threats to the global environment;
- (c) Enhance engagement with the private sector through PPP mechanisms, which will bring a new pool of talent and resources to the GEF partnership in its mission to generate global environmental benefits;

- (d) Ensure robust engagement with the private sector in the current organizational and operational structure of the GEF after the inception of the Resource Allocation Framework (RAF);
- (e) Attract very significant co-financing from the private sector and other parties (which should always be at least three times the level of GEF funding in the case of the GEF Earth Fund); and
- (f) Attract additional funding of parallel contributions from donors in addition to the leverage of co-financing at the project level. The ability to attract these types of contributions at the GEF Earth Fund level can significantly increase the overall impact of the work carried out through the Platforms.

Earth Fund Outline Business Plan for 2010-2014

186. It is proposed that resources be earmarked for an expanded and recapitalized Earth Fund in GEF-5, with the aim of leveraging additional resources from the private sector.

187. The GEF Earth Fund is not a purely commercial vehicle. This is consistent with the GEF Instrument which provides for grant and concessional funding. Large PPP funds typically invest on the basis of a commercial return into commercially viable projects and businesses, and typically focus on large investments, which justify the expenses related to the required due diligence and management of the investment process. It is well known for instance that the costs associated with preparing, documenting, managing and monitoring a \$3 million debt or equity investment in an infrastructure project are typically not that much less than the costs associated with a \$30 million investment in the same or a similar project. It is not anticipated that the Earth Fund, even in a strong recapitalization scenario, would contemplate single project investments as large as \$30 million (although Platforms which include multiple investments may well exceed \$30 million in a robust replenishment scenario). A key to the success of the Earth Fund is attracting investment partners at the Platform level who are not seeking a full commercial rate of return on their investments. There is a very substantial universe of "triple bottom line" investors active in the global environment arena, including affiliates of large multinational corporations. Attracting such investors is not considered to be difficult in the context of the concessional funding being offered by the Earth Fund, and it is anticipated that even in a strong replenishment scenario the demand for Earth Fund resources will substantially exceed supply.

188. Assuming a successful GEF replenishment in 2010, an expanded and recapitalized Earth Fund will incorporate lessons learned from the pilot project and operate at a greater scale (depending on the level of replenishment). Achieving scale will allow the Earth Fund to promote and support larger investments and generate more sustainable levels of reflows, as the technical assistance and business advisory support to complement investment activities will in general be a smaller percentage of the overall investments.

189. An enlarged GEF Earth Fund under GEF-5 will allow Platforms and projects to be supported in line with any of the GEF-5 strategic goals and objectives. There are specific themes that could be particularly appropriate for the GEF Earth Fund under GEF-5, and some potential examples are:

- (a) Accelerating the development and deployment of advanced energy technologies for developing countries;
- (b) Combining public and private financing of projects incorporating renewable energy technologies, energy efficiency technologies and low carbon transport and urban system technologies ;
- (c) Developing energy efficiency facilities through financial intermediaries;
- (d) Addressing critical service needs with proven technologies that have shown limited success through the normal GEF project approach (for example adapting and replicating successful business models for scaling up the provision of solar home systems in areas without grid access, noting there are close to 2 billion people without grid access who must often resort to environmentally degrading means to obtain their basic energy needs);
- (e) Promoting business participation in sustainable forest management (SFM) initiatives;
- (f) Deploying market-based instruments for biodiversity protection and the provision of ecosystem services in developing countries. This may include initiatives under the Business, Biodiversity and Offsets Program (BBOP) which generates measurable conservation outcomes through biodiversity offsets associated with extractive industry project development;
- (g) Combining development and conservation by means of a nature-based "BioDevelopment Fund," a concept to promote the utilization of the emerging tools of genomics, proteonomics and even biomimetic applications to tap into the massive biodevelopment potential of the global protected areas system. Its design would seek to complement the developing CBD agenda on Access and Benefit Sharing (ABS);
- (h) Deploying PPP models for reduction and treatment of pollution, including POPs and hazardous chemicals;
- (i) Engaging in carbon finance activities through the Earth Fund where this will complement other programs; and
- (j) Developing major strategic partnerships with the business community in the International Waters focal area that would work in tandem with other GEF projects and programs for maximum impact. A "Save the Source" platform with industry on water efficiency and water foot-printing, a "Rebuilding Marine Fisheries" platform with banking/fishing/import/export/food industries, and a "Reversing Dead Zones" platform with agri-business related to nitrogen pollution have the potential to stimulate global impacts.

190. An overall replenishment range of \$4.5 - \$5.5 billion is assumed for the purpose of this document to support an allocation range of \$90 million to \$110 million towards the recapitalization of the Earth Fund. Taking the midpoint of this range for illustration, the Earth Fund recapitalized at the \$100 million level might initially support 10 Platforms at an average of

\$10 million each.²² These Platforms would be expected to leverage an additional estimated \$400 million in co-financing, thereby constituting total capital deployment on the order of \$500 million. On the basis of return of 60 percent of the \$100 million base capital (without dividends), it is anticipated that reflows of approximately \$60 million would return from the Platforms to the Earth Fund Trust Fund over time. On this basis, the Earth Fund would be partially self-sustaining and engage in a modest but meaningful level of investment across a wide range of activities including climate change mitigation, chemicals management and ecosystem services.

191. A replenishment level of \$6.5 billion is assumed to support a \$150 million recapitalization of the Earth Fund. At this level, the Earth Fund might initially support 12 Platforms at an average of \$12.5 million each.²³ These Platforms would be expected to leverage an additional estimated \$600 million in co-financing, thereby constituting total capital deployment on the order of \$750 million. On the basis of return of 60 percent of the \$150 million base capital (without dividends), it is anticipated that reflows of approximately \$90 million would return from the Platforms to the Earth Fund Trust Fund over time. On this basis, the Earth Fund would be partially self-sustaining and engage in a significant level of investment across a wide range of activities including climate change mitigation, chemicals management and ecosystem services, and in addition be able to undertake some larger transboundary initiatives including international waters.

192. It may be worth noting that a larger allocation to the Earth Fund would be more likely to attract substantial additional contributions from private philanthropies, thereby enhancing the profile of the Earth Fund as a vehicle of choice for private sector participation in the pursuit of global environmental benefits and promoting environmental sustainability in corporate practices. A strong recapitalization scenario would present an opportunity to catalyze major investment volumes through the regional MDBs (EBRD, IDB, AfDB and AsDB) in conjunction with the private sector. For example, based on preliminary contact with EBRD and IDB, each institution has provided a concept for a substantial Earth Fund Platform. AfDB and AsDB have indicated similar levels of interest, and are ready to provide concept papers. Of course IFC has already been allocated a substantial Platform, which is currently under implementation, and should be in line for additional resources once the current Platform is close to being fully invested.

193. The Secretariat proposes to organize a pledge session for major corporations (such as Fortune 500 companies and their global equivalents) and foundations once the allocation for the Earth Fund has been established at the conclusion of the GEF-5 replenishment process and approved by Council. This has the potential to give broader visibility to the Earth Fund, expand deal flow and further leverage public sector resources.

Enlargement and strengthening of the Earth Fund Board is seen as a key measure to 194. support the future operation of the Earth Fund. The Secretariat is already working with its partners to identify suitable candidates, and is committed to substantially strengthen the Board by

²² Individual Platforms would be expected to vary substantially in size, for example a large Platform might utilize \$20 million of Earth Fund resources, and a small Platform might utilize \$5 million of Earth Fund resources. ²³ Individual Platforms would be expected to vary substantially in size, for example a large Platform might utilize

^{\$30} million of Earth Fund resources, and a small Platform might utilize \$5 million of Earth Fund resources.

mid-2010. The Secretariat will consult Council prior to the selection of any new Board members.

195. With an enlarged and strengthened Earth Fund Board in place, there will be increased opportunity for the GEF to directly engage with key private sector entities at top executive level in a manner which will contribute to an enhanced deal flow of creative Platforms and projects on the basis of strategic partnerships which make sound business sense and generate global environmental benefits in line with the overall GEF mandate.

196. The Secretariat looks forward to continued dialogue with Participants, GEF Agencies and other stakeholders during the remainder of the GEF-5 replenishment process in order to increase their comfort level with the Earth Fund processes, receive feedback on future priorities and optimize the operating modalities of the Earth Fund as a basis for the strongest possible replenishment of the Earth Fund

CORPORATE PROGRAMS STRATEGY

197. Corporate programs are those activities undertaken by the GEF to support work in the focal areas. Corporate activities are largely cross-cutting in nature and respond to the needs of countries and civil society organizations to develop the capacity to undertake activities that generate global environmental benefits. Currently, four corporate programs are under implementation: (i) the Country Support Program;²⁴ (ii) the National Dialogue Initiative;²⁵ (iii) the Cross-cutting Capacity Building Program; and (iv) the Small Grants Program.

198. The GEF-5 strategic approach to corporate programs, aims to build further on the processes established in GEF-4 to ensure that GEF programming is more closely tied to the needs of recipient countries, taking into account feedback received from the GEF country focal points, such as: (i) the need for greater coordination among national officers responsible for the GEF from different perspectives, e.g., GEF focal points, convention focal points, ministries of finance, CSOs; (ii) the need for greater visibility and recognition of GEF support to countries; and (iii) the need to re-focus the different components of the Country Support Program to help countries undertaken new and/or redesigned GEF activities.

199. As a new corporate feature in GEF-5 it is proposed that each country develop a voluntary *National GEF Business Plan* that will describe how countries propose to utilize GEF resources. During GEF-5, countries that so request shall be supported in the preparation of such voluntary national plans. In this context, it is proposed that the system of Focal Points be strengthened by the establishment of GEF National Steering Committees. Another GEF-5 proposal is to integrate the National Dialogue Initiative into an expanded Country Support Program. Basic cross-cutting capacity development support will continue to be provided. The Small Grants Programme will be continued in GEF-5 as a new project designed in accordance with Council decisions. The GEF will continue to work with GEF Agencies to support activities involving innovation with Civil Society Organizations, for example through the Development Marketplace. In addition, the Secretariat, in collaboration with the Agencies, will further strengthen the incipient conflict resolution approach established in GEF-4.

Voluntary National GEF Business Plans

200. Being fully coordinated with national planning processes is will better align GEF activities to the needs of the recipient countries. The value of such coherence among international agencies has been emphasized repeatedly at all major international conferences on development, including the 2005 World Summit, the Millennium Declaration, the Paris Declaration on Aid Effectiveness, the 2008 Accra Agenda for Action and the Millennium Development Goals, the Accra High Level Forum and the Doha Financing for Development Outcomes.

²⁴ Initiated in 2006 to address the capacity and knowledge needs of the GEF country focal points.

²⁵ Initiated in 2004 to facilitate a series of country-level multi-stakeholder dialogues on GEF-related issues and themes. National dialogues aim to raise awareness about the GEF, strengthen country-level coordination and ownership, and clarify and address country GEF needs and priorities linked to national development strategies.

201. For a large part of the GEF's history, country programming was mediated through the GEF Agencies. While such an approach ensured that GEF-financing was sought for activities within the context of planning and assistance frameworks²⁶ established between a GEF Agency and a country, there is scope for further improvement. During GEF-4, with the introduction of the Resource Allocation Framework, direct communications between the Secretariat and countries were initiated to facilitate programming and to ensure that competition among GEF Agencies did not result in a dilution of country priorities.

202. At the beginning of GEF-4, the Secretariat contacted each recipient country to ascertain how they intended to utilize their allocated funds under the RAF. This first attempt to identify from the beginning an overall approach to GEF funding was well received and helped countries in their efforts to establish priorities. To further strengthen strategic engagement of the GEF at the country-level, it is proposed that each recipient country prepare, with GEF financial support, as necessary, a voluntary *National GEF Business Plan*. Such plans will cover all relevant focal areas and should describe how GEF allocations will be programmed to carry out national and regional projects in the context of what the country can contribute to the global environment. The national plans will serve not only as a priority setting tool for the countries throughout the period but also as a guide for GEF Agencies as they assist recipient countries. They should be prepared in a consultative and participatory manner under the guidance of the GEF National Steering Committees and coordinated by the GEF operational focal points. The Secretariat will be available to facilitate the preparation of such plans as necessary.

203. The submission of these national plans is not a requirement to access GEF support for projects. Those countries that decide to prepare a plan will be granted up to \$30,000 from the corporate programs budget for that purpose. The voluntary national plans will be shared with the respective conventions for public disclosure as well as through the GEF website.

204. Over the history of the GEF there has been an effort to align GEF interventions ever more closely with national priorities. The decision that each country would have both a Political and an Operational Focal Point with clearly defined responsibilities was taken with this objective in mind. In particular, the Operational Focal Points were expected to follow closely the project cycle and to ensure that projects/programs would respond to national priorities. In order to further strengthen this system and to ensure internal coordination, it is proposed that beginning in GEF-5 each recipient country that does not already have one will set up a GEF National Steering Committee. This Committee will be chaired by the country's Operational Focal Point, and should include, *inter alia*, the ministries of environment, agriculture, industry, energy, planning and finance, convention focal points, GEF Agencies, SGP national coordinator as well as representatives of Civil Society Organizations. Each country may adapt the membership to national circumstances while respecting the principles of transparency and broad participation of stakeholders.

205. The main responsibilities of a GEF National Steering Committee will be to finalize the *National GEF Business Plans*, and review and clear all projects/programs that are submitted for support to the GEF. In this manner the programming of GEF resources in each country will be

²⁶ United Nations Development Assistance Framework (UNDAF) of the UNDP, and Country Assistance Strategies (CAS) or Poverty Reduction Strategy Program (PRSFP) of the World Bank.

approved by a process of internal consultation with all relevant stakeholders. The endorsement letter from the Operational Focal Point that backs up each PIF/project document will therefore state that the Steering Committee has considered and approved the document for submission to the GEF in response to its national priorities.

National Dialogue Initiative

206. Currently, the National Dialogue Initiative project facilitates a series of country-level multi-stakeholder dialogues on GEF-related issues and themes. National dialogues aim to raise awareness about the GEF, strengthen country-level coordination and ownership, and clarify and address country needs and priorities linked to GEF focal areas and national development strategies. The program is currently implemented by UNDP under the strategic guidance of an inter-agency Steering Committee, chaired by the GEF CEO.

207. In order to further integrate these dialogues into the GEF Secretariat corporate activities and so that they may serve as a tool for the work of GEF National Steering Committees, it is proposed that in GEF-5 these dialogues become an individual component of the Country Support Program as described below.

Country Support Program

208. The main objective of the Country Support Program is to strengthen the capacity of GEF focal points to effectively carry out their mandates for supporting global environmental programs in their countries and constituencies. This includes the improvement of overall national and constituency coordination on global environmental issues. The program is currently jointly implemented by UNDP and UNEP under the strategic guidance of an inter-agency Steering Committee, chaired by the GEF CEO.

209. Given its importance in conveying the strategies, policies and programs of the GEF at the country level, as well as in ensuring that the GEF identity is linked to the results accomplished through GEF financed activities, it is proposed that the Country Support Program be managed by the GEF Secretariat, and be composed of the following elements:

- (a) <u>Broad, Multi-stakeholder Dialogues</u>.²⁷ These will be organized along the lines of the current National Dialogue Initiative, at the request of the GEF National Steering Committee;
- (b) <u>Constituency Workshops</u>. The Country Support Program (CSP) currently includes 8 sub-regional workshops a year that provide an opportunity for focal points to meet with their counterparts from other countries in the region and other GEF partners to discuss and review policies and procedures and to share lessons and

²⁷ These dialogues are expected to involve a diversity of government ministries and agencies, NGOs, communities, academic and research institutions, the private sector, as well as partners and donors in the country. These dialogues will continue to support countries to (i) inform themselves about global environmental issues and GEF policies and procedures; (ii) take stock of GEF-financed activities and results of GEF country portfolio; (iii) further define priorities for funding and develop national strategies and plans; (iv) strengthen national GEF coordination processes and mechanisms and inter-sectoral coordination; and (v) enhance inter-agency collaboration and partnerships and promote integration of GEF in national environmental and sustainable development plans and processes.

experiences from development and implementation of GEF projects and their integration within national policy frameworks. It is proposed that in GEF-5 this be transformed into one GEF constituency-level workshop a year, to keep the GEF national focal points, convention focal points and other key stakeholders, including civil society, abreast of GEF strategies, policies and procedures and to encourage coordination. These 15 meetings will follow the outline of the current sub-regional workshops and evolve based on participant feedback. This new format will accommodate a larger number of participants per country and keep the workshops manageable. Support will include organization of the meeting, travel and DSA allowance for participants and Secretariat;

- (c) <u>Council Member Support.</u> The current practice is to hold two constituency meetings per year to discuss issues before each Council meeting and to adopt positions that the Council Member may bring to a meeting. Since, if point (b) above is approved, there will already be one constituency meeting in the format of a workshop, though unrelated to Council work; it is proposed that in GEF-5 Council Member Support is reduced to one constituency meeting per year. In addition to the travel and DSA for all participants, including the Secretariat, the budget assistance for organizing these meetings will be increase from \$ 2,000 to \$4,000 per meeting;
- (d) <u>Direct Support to Operational Focal Points</u>. The GEF currently provides resources for the operational focal points to carry out annual work programs in support of their activities. Since the focal point will now require support to organize the National Steering Committees it is proposed that in GEF-5 this activity continues and that the amount be increased from \$8,000 to \$10,000 per year;²⁸
- (e) <u>Knowledge Management Tool</u>. (http://www.gefcountrysupport.org) is currently designed on the basis of the requirements and needs expressed by GEF focal points. It is proposed that during GEF-5 this tool be further developed to reflect the evolving needs of GEF focal points, and also to target other relevant stakeholder groups, in particular convention focal points;
- (f) <u>Familiarization Seminars</u>. These are currently aimed at new GEF Agency personnel and a handful of new operational focal points. It is proposed that in GEF-5 a GEF Familiarization Seminar be held once a year in Washington, D.C, to train new country focal points and GEF Agency officers on GEF strategies, policies and procedures.

210. The Country Support Program, as described above, will address different aspects of basic capacity development in recipient countries. In addition, countries need capacity development that goes beyond the basic support provided through the Country Support Program. While a major share of capacity development activities are undertaken through programs and projects funded under the GEF focal areas, there are a critical set of cross-cutting capacity development activities that are supported under corporate programs.

²⁸ The amount has not been adjusted for several years, and there is the pressing need for more resources for the support to be effective.

Capacity Development

211. All capacity development activities in the GEF have been undertaken under the aegis of the *Strategic Approach to Enhance Capacity Building* (GEF/C.22/8) approved by the GEF Council in GEF-4. The strategy reflects the guidance from the conventions to the GEF to provide support for country-driven capacity development activities, and it follows on from the Council approved Capacity Development Initiative (GEF/C.13/9 and GEF/C.17/6).

212. GEF funds are targeted for cross-cutting capacity development activities in recipient countries. In GEF-4, support has been provided to prepare National Capacity Self Assessments (NSCAs) in 143 countries as requested by the Capacity Development Initiative.

213. Since all these projects have been financed and bearing in mind the evolution in the needs of countries and in the guidance from conventions over the last few years since the strategy was put in place, it is proposed that these activities be slated for evaluation in the course of 2010 in order to prepare a new strategy for discussion by the Council in 2011. This new strategy will be prepared in consultation with the Agencies and will be based on the results and recommendations of the evaluation.

214. This strategy could include:

- (a) A global project management curriculum that would include project identification, preparation, implementation, monitoring and evaluation issues as well as the project cycle, incremental reasoning and cost effectiveness analysis and other relevant items. The program will aim to have up to ten trained and certified project managers per country. These certified managers will have developed skills that qualify them to manage any cooperation project a country may undertake with other partners. Thus, developing effective in country capacity.
- (b) Targeted capacity building to develop legislative and regulatory frameworks and the institutional capacity to work on programmatic approaches, as well as on how to manage a program and how to prepare projects under a program.

215. Meanwhile, it is proposed that in GEF-5, capacity development through regular projects and programs are the central part of GEF's approach to capacity building, while ensuring that the activities are focused with specific targets, indicators, and tracking tools for capacity development for each focal area.

216. Cross-cutting capacity development through stand-alone projects will be limited to those focused on addressing specific strengthening of capacities that are intimately related to the work of the GEF or that develop capacities that have practical application in implementing the international conventions. In addition, resources will be allocated to addressing any new capacity development requirements that may arise in the context of the Conventions.

Table 7: Capacity Development Results Framework

Objectives	Expected Outcomes	Core Outputs	Key Expected	Key Expected	Key Expected
			Outputs under \$4.5	Outputs under \$5.5	Outputs under \$6.5
			billion Scenario	billion Scenario	billion Scenario
Objective 1:	Consultative	Established platform	Consultative	Consultative	Consultative
Enhance capacities	mechanism	(seminars, national	frameworks	frameworks	frameworks
of stakeholders for	established for	consultations and	established in all	established in all	established in all
engagement through	proactive and	dialogs) for enabling	countries to	countries to coordinate	countries to coordinate
consultative process	constructive	all key stakeholders to	coordinate GEF	GEF investments	GEF investments
	engagement of all	participate	investments		
	interested				
	stakeholders		56 GEF constituency	56 GEF constituency	56 GEF constituency
			level	level	level
			workshops/meetings	workshops/meetings	workshops/meetings
			organized	organized	organized
			32 Country dialogue	36 Country dialogue	40 Country dialogue
			workshops and	workshops and	workshops and
			seminars organized	seminars organized	seminars organized
			60 Constituency	60 Constituency	60 Constituency
			meetings organized	meetings organized	meetings organized
			SGP National	SGP National Steering	SGP National Steering
			Steering Committees	Committees	Committees
			National Eagol	National Ecol Crowns	National Easal Crowns
			Groups in 132	in 132 countries	in 132 countries
			countries actively	actively participating	ni 152 countries
			participating in GEE	in GEE National	in GEE National
			National coordination	coordination	coordination
			mechanisms	mechanisms	mechanisms
Objective 2.	Institutions and	Institutions and	Ability of	Ability of stakeholders	Ability of stakeholders
Generate, access and	• Institutions allu	stakeholders trained	stakeholders to	to diagnose	to diagnose
use of information	skills and	how to use different	diagnose, understand	understand and	understand and
	SKIIIS and				

Goal: Build national and regional capacities and enabling conditions for global environmental protection and sustainable development

Objectives	Expected Outcomes	Core Outputs	Key Expected Outputs under \$4.5	Key Expected Outputs under \$5.5	Key Expected Outputs under \$6.5
			billion Scenario	billion Scenario	billion Scenario
and knowledge	 knowledge to research, acquire and apply information collective actions Increased capacity of stakeholders to 	tools available to manage information Stakeholders are better informed via workshops and trainings about global challenges and local actions required	and transform information and knowledge into local actions increased and retained in 10 countries Knowledge platform	transform information and knowledge into local actions increased and retained in 16 countries Knowledge platform established to share	transform information and knowledge into local actions increased and retained in 20 countries Knowledge platform established to share
	 diagnose, understand and transform complex dynamic nature of global environmental problems and develop local solutions Public awareness raised and information management improved 	Public awareness raised through workshops and other activities	established to share lessons learned among CBOs and CSOs across 112 SGP countries	lessons learned among CBOs and CSOs across 120 SGP countries	lessons learned among CBOs and CSOs across 132 SGP countries
Objective 3: Strengthened capacities for policy and legislation development for achieving global benefits	 Enhanced institutional capacities to plan, develop policies and legislative frameworks for effective implementation of global conventions 	National plans, policies and legal frameworks developed	Voluntary GEF Business plans developed for 100 countries Institutional capacities enhanced in10 countries to implement global conventions	Voluntary GEF Business plans developed for 120 countries Institutional capacities enhanced in 18 countries to implement global conventions	Voluntary GEF Business plans developed for 150 countries Institutional capacities enhanced in 25 countries to implement global conventions

Objectives	Expected Outcomes	Core Outputs	Key Expected Outputs under \$4.5	Key Expected Outputs under \$5.5	Key Expected Outputs under \$6.5
			billion Scenario	billion Scenario	billion Scenario
Objective 4: Strengthened capacities for management and implementation on convention guidelines	 Enhanced institutional capacities to manage environmental issues and implement global conventions 	Institutional capacities for management of environment strengthened. Standards developed and adopted	Management capacities for implementation of convention guidelines and reporting enhanced in 15 countries	Management capacities for implementation of convention guidelines and reporting enhanced in 20 countries	Management capacities for implementation of convention guidelines and reporting enhanced in 25 countries
	 Good environment management standards defined and adopted Sustainable financing mechanisms in place at national level 	Financing mechanisms for environment created	Capacities of 6500 CSOs and CBOs as SGP partners, strengthened Sustainable financing mechanisms developed in 14 countries	Capacities of 7500 CSOs and CBOs as SGP partners, strengthened Sustainable financing mechanisms developed in 24 countries	Capacities of 9000 CSOs and CBOs as SGP partners, strengthened Sustainable financing mechanisms developed in 38 countries
Objective 5: Capacities enhanced to monitor and evaluate environmental impacts and trends	 Enhanced skills of national institutions to monitor environmental changes Evaluation of programs and projects strengthened and improved against expected results Increased capacity for 	Monitoring systems established Evaluation system for programs and projects established Learning system established to provide feedback to policy, strategies and management decisions from evaluation reports	Capacities for monitoring of projects and programs developed in 13 countries Learning and knowledge management platform established to share lessons learned among CBOs and CSOs across 132 SGP participating countries	Capacities for monitoring of projects and programs developed in 20 countries Learning and knowledge management platform established to share lessons learned among CBOs and CSOs across 132 SGP participating countries	Capacities for monitoring of projects and programs developed in 25 countries Learning and knowledge management platform established to share lessons learned among CBOs and CSOs across 132 SGP participating countries

Objectives	Expected Outcomes	Core Outputs	Key Expected	Key Expected	Key Expected
			Outputs under \$4.5	Outputs under \$5.5	Outputs under \$6.5
			billion Scenario	billion Scenario	billion Scenario
	evaluation				

Small Grants Program

217. The Small Grants Programme (SGP) enables global environmental benefits to be delivered at local levels through local communities, community based organizations (CBO), and NGO action. By the end of GEF-4 participation in the GEF Small Grants Programme (SGP) had grown to 123 countries and more than 11,000 partnerships with local NGOs and CBOs. At least ten (10) more countries have expressed their interest in joining the SGP and there is an opportunity in GEF-5 to make the SGP truly global as the GEF's premier flagship country-driven mechanism to provide fast and effective access to GEF resources for civil society and for poor and vulnerable communities.

218. To achieve this requires a combination of strategic, managerial and financial innovations. It is proposed that the more mature SGP country programmes are upgraded in GEF-5, allowing them to seek GEF funding through a modality equivalent to a Full Size project. Others will continue to rely on the core programme for funding; using resources both within and outside the resource allocation system. All in all there would be 133 countries and more than 20,000 projects and local partnerships established by the end of GEF-5.

219. Upgraded country programmes will function in a more independent manner and take broader responsibilities, seeking access to larger amounts of funding from a variety of sources, while still remaining a part of the overall global SGP for knowledge exchange and communications. Upgraded country programmes will continue to fully comply with SGP operational guidelines and fiduciary standards.

220. The decentralized and country-driven nature of SGP will be sustained through strengthened SGP National Steering Committees and National Focal Groups. These will be required to actively and effectively preserve, promote and disseminate the GEF identity of the SGP. Strategic advice will be provided by the existing inter-agency Steering Committee chaired by the GEF CEO and UNDP will retain responsibility and accountability for programming and operational management.

221. Basic resources will be assigned from the core fund and it is anticipated that additional resources will be mobilized through allocations by countries from their STAR allocations, GEF projects submitted by the upgraded country programmes, and co-financing raised from other sources, including the CBO's and NGO's own resources.

Conflict Resolution

222. A well-functioning conflict resolution system is critical to ensuring that recipient countries have a trustworthy system for resolving complaints and conflicts that emerge in the process of requesting GEF resources and implementing GEF-financed programs and projects. This is key to enhancing the credibility of the GEF partnership with all stakeholders.

223. A beginning was made in GEF-4 with the introduction of a Conflict Resolution Commissioner in the Secretariat, and establishment of some basic norms of engagement with GEF Agencies and countries in identifying and resolving conflicts in a timely manner. Further development of this function in GEF-5 will include, inter-alia:

- (a) Enhanced measures to protect the integrity of the GEF partnership (policy reviews and assessments to sustain confidence in the GEF, review of public disclosure, development of guidelines, procedures and tools, sensitization of stakeholders, enhance responsiveness);
- (b) Conflict/dispute settlement framework for handling cases, documentation, data base and tracking tools, communication, preventive strategy, rules and procedures, strengthening capacity at the level of the Secretariat and among other stakeholders; and
- (c) Special outreach and cooperation with GEF Agencies, Focal Points and Conventions.

RESULTS-BASED MANAGEMENT FRAMEWORK

224. Results Based Management (RBM) has been on the GEF agenda for several years. It is codified in policy, embedded in strategy at the Focal Area level and helps to drive reporting. While these steps have generated well documented successes, there tends to be an over-emphasis on reporting project results and insufficient attention to using portfolio results information for improving projects and for internal management. These gaps make it difficult to show interim progress towards outcomes, to identify management issues early on, and to take timely corrective action.

225. The GEF-5 approach moves beyond reporting results and gives attention to using results information for accountability, internal management, learning and knowledge management. During GEF-5 the Secretariat will build on the good practice from GEF-3 and GEF-4, to focus on three main areas: Portfolio Outcome Monitoring; Portfolio Process Monitoring, Learning and Knowledge Management. In GEF-5 RBM covers:

- (a) Defining realistic expected results that meet country identified needs and align with the mandate of the GEF;
- (b) Monitoring portfolio progress toward results and resource use, by means of appropriate indicators and targets;
- (c) Managing risks, meeting service standards and striving for efficiency, bearing in mind the expected results and resource levels;
- (d) Increasing knowledge by learning, knowledge dissemination and feedback into decision making; and
- (e) Reporting on the results achieved and resources disbursed.

RBM Areas

226. **Portfolio Outcome Monitoring** at both the focal area and corporate-level, based on the indicators and targets set out in each Focal Area results framework and the GEF Strategic Results Framework (Annex 2). Portfolio outcome monitoring will occur on an annual basis to track progress in reaching intended outcomes.

227. The Secretariat in coordination with the GEF Agencies will implement a consistent and integrated RBM approach with the introduction of organization-wide strategic goals. These high level strategic goals will allow the GEF to show concrete contributions to global environmental benefits, environmental conventions, and the MDGs, as well as help prioritize results for progress tracking and reporting on an annual basis.

228. To further results chain coherence, GEF-5 will adopt recognized terminology (based on OECD DAC), aim for a more consistent approach to results levels across Focal Areas, and focus results measurement and reporting at two main levels – portfolio and corporate levels.

229. GEF's results monitoring at the portfolio level will identify and measure outcome results achieved during the project life rather longer-term impacts, which are better captured through

evaluations. GEF results monitoring will focus on the measurement of outcomes and core outputs. Immediate outcomes, core outputs and other measures of performance are good proxies for progress towards achieving higher-level results. Implementing Agencies will be responsible for project level results measurement and reporting.

230. During the GEF-5 period, greater attention will be given to streamlining reporting requirements and supporting the development or refinement of performance measurement tracking tools and systems.

231. **Portfolio Process Monitoring** to track GEF efficiency and effectiveness based on the indicators and targets in Annex 2. Process monitoring is a useful management tools and will take place on an ongoing basis to track whether the portfolio is being implemented as intended, set standards are being met, and if resources are being used efficiently. Indicators for corporate level processes will be tracked and will include: quality at entry (project approval) for each focal area, which will take into consideration project objectives, strategic relevance, role/ contribution to the GEF mandate and convention goals.

232. It will also include: (i) RBM issues such as design of the baseline, collection of baseline data, and a project monitoring strategy with sufficient budget allocation; (ii) document processing efficiency including turn around and approval times; (iii) Resource allocation including securing financing, financing mechanisms and efficiency of use; and (iv) Gender and staff issues.

233. To support better management, a summary dashboard report will be prepared for managers on a six month basis, providing an overview of portfolio design and implementation progress, status of disbursements, service standard achievement and progress towards outcome level results. Timely information will give managers periodic updates at the portfolio level and ensure more timely service delivery.

234. Learning, knowledge management and feedback of results in strategy, policy and project development. During GEF-5 an objective will be to strengthen knowledge creation, sharing and use- either tacit knowledge that resides with individuals or codified knowledge documented on paper - as a way of doing business. Priorities include developing tools, guidance and standards, and strengthening analytical capacity specifically with regards to assessing results and progress towards learning objectives. Meeting these priorities will help the GEF and its partners to promote innovation based programs which work, support institutional and policy transformation, and consolidate and share targeted research and project specific knowledge.

235. There is a growing need for lessons and experiences from these types of projects, and to ensure that emerging factors influence GEF's strategies, policies and the projects it finances. Knowledge dissemination would be closely linked to GEF-5 knowledge management (KM) actions. Specifically, greater attention to learning and knowledge management in GEF-5 will help:

(a) Bring greater visibility to the work of the GEF and strengthen its environmental leadership role;

- (b) Strengthen partnerships and communication both internally within the GEF, with Council, and with other stakeholders. Fostering partnerships for broader knowledge sharing and learning with GEF stake holders (including Council Members, GEF Agencies, focal points, staff), other Environmental Organizations/Institutions and the general public;
- (c) Identify successful innovation and ensure that GEF supports cutting edge projects and not only those that work well;
- (d) Strengthen internal KM processes and generate GEF knowledge products for dissemination to GEF staff and stakeholders, including the consolidation of evaluation findings and recommendations, lessons and good practices so that they are easily accessible, disseminated and replicated; and
- (e) Consolidate GEF Agency project knowledge, highlighting project results, cost effectiveness and scientific evidence supporting the achievement of global environmental benefits.

Focal Area Learning

236. The GEF, like other agencies, generates, disseminates and uses many types of knowledge. It learns from its clients and partners through its support of knowledge-intensive or innovation-based programs. A few examples of focal area specific learning network programs include:

- Biodiversity Planning Support Program BIOPLAN
- IW-LEARN
- Learning network for solar PV projects managers
- National Capacity Self Assessment network
- Persistent Organic Pollutants
- Sharing Reef Knowledge SHARK
- Sustainable Transportation/ Fuel Cell Bus
- Adaptation Learning Mechanism ALM

237. As GEF programming evolves, the demand for new types of learning and knowledge mechanisms increases. Meeting the expanded range, diversity and complexity of knowledge demands will be an important factor in determining the GEF's effectiveness.

A Corporate Focus

238. While it is important to continue to support focal area specific learning and knowledge management, a corporate approach will help leverage lessons learned from projects and to replicate successes and create synergies across focal areas, the GEF portfolio and the GEF partner network. To achieve broader coherence in knowledge, generation, dissemination and use, the GEF plans a corporate approach to knowledge management that will compliment project and focal area specific initiatives by providing a systematic approach based on the principles of coherence and standards. GEF's corporate approach to knowledge management would be based on:

- (a) Development of information approaches/systems to allow for the analysis and codification of lessons at the portfolio level, capitalizing on the generation of knowledge products and services at project level. For example, all projects as appropriate would develop a GIS map of the project area using tools and technical input developed at corporate level. While the actual map would be part of the project monitoring plan, standards and technical specifications would be developed to ensure coherence across the GEF network.
- (b) Knowledge dissemination building on project level practice, experience and lessons. For example all projects would be required to develop a project specific web site that would facilitate the easy posting and transfer of lessons. Again the specific package and tools would be developed corporately but made available to the project level to avoid duplication of efforts and cost.
- (c) Knowledge uptake, which is critical for ensuring that knowledge products across countries and regions are shared to reinforce project design, policies and strategies and to support management, advocacy, partnership building and professional development. During GEF-5 the Secretariat will undertake selective and targeted field learning monitoring. These missions will allow for in-depth review of selected themes and learning objectives, factors affecting progress towards results or process issues. Current and relevant information will be essential for updating strategies to minimize risks on an ongoing basis.

239. Specific learning objectives are outlined in each focal area strategy and in addition to the above mentioned field learning monitoring; processes will be put in place to track progress, to report on and learn from interim results, and to look critically at risks affecting the ability to deliver. Topic priorities for GEF-5 will be developed in tandem with the development of each Focal Area strategy in consultation with STAP, the TAGS and the GEF Agencies. STAP would be called upon to support the gathering of lessons, and undertaking the generation and dissemination of knowledge products and targeted research.

240. Examples of learning objectives include:

Enhancing Social Impacts through Improved Understanding of the Causal Relationships between Environmental Management and Local Community Welfare including the management of protected areas, landscapes under SLM and SFM, and under transboundary water management. For Climate change mitigation employment generation and market expansion of clean energy could be examined.

Enhancing the catalytic effect of GEF financing with the aim of: identifying, scaling up and replicating best practices, improving the science evidence base to develop projects, strategies and policies, and capture learning from demonstrations across all focal areas. The Secretariat will also work with GEF Agencies to ensure that performance and risks are more carefully rated and tracked at the portfolio level. 241. The GEF corporate approach to knowledge management brings the contributions of all partners together, using tools, systems and standards that would allow comparability, analysis and replication of project specific learning.

Benefits of RBM

242. The main benefits of strengthening RBM in GEF-5 are:

- (a) Greater catalytic impact from GEF financing. A more strategic development of projects, policies, and strategies based on a standardized and regular flow of performance information will result in greater benefits from GEF financing. Replicating good practice and avoiding repeated weaknesses will improve outcome achievement and portfolio effectiveness.
- (b) **Improved portfolio performance and management.** RBM will contribute to more efficient processes to support project development, monitoring and reporting based on regularly updated monitoring information. Attention will be given to working with GEF Agencies in order to reduce project development time and costs, replicate good practice, and provide stakeholders with timely feedback;

PROPOSED RESOURCE ENVELOPES FOR GEF-5

243. The resource envelopes for GEF-5 are based upon the focal area strategies, cross-cutting strategies, and corporate program strategies as outlined in this document. The strategies have been developed to support an approach to programming that would be supported by a substantial increase in the replenishment of the GEF.

244. In formulating the specific indicative target amounts to program for each focal area and theme, it is important to take into account the following: (i) any reserves for foreign exchange and investment income volatility implemented by the Trustee; (ii) the likelihood of unfulfilled GEF-5 pledges; and (iii) the risk of non-payment of GEF-5 Instruments or Commitment or Qualified Instruments of Commitment (i.e., new arrears). Each of these events impacts the actual funding capacity during a replenishment period. Consequently, the GEF-5 resource allocation system has to be adjusted on an ongoing basis to reflect each of these three factors. The Trustee and the Secretariat will coordinate in order to reflect the required adjustments in the Corporate GEF Business Plans presented for Council review during the GEF-5 period.

245. In considering targets for replenishment, three levels are proposed.

- (a) A replenishment target of \$4.5 billion represents a 50 percent increase over GEF-4 levels,²⁹ and provides for increases in all focal areas.
- (b) A target of \$5.5 billion represents a 75 percent increase over GEF-4 levels and would provide for a strong increases in all focal areas.
- (c) A target of \$6.5 billion provides room for significant increases in activities across the board. It also provides room for implementation of a pragmatic resource allocation system.

246. Table 8 presents the proposed indicative funding levels for each focal area and theme, at each of the illustrative targeted replenishment levels (\$4.5 billion, \$5.5 billion, and \$6.5 billion). This menu of options provides Participants with the opportunity to consider either asymmetric or pro-rata allocations to different focal areas and themes at different replenishment levels.

²⁹ In real terms (inflation-adjusted) it would be the first increase in replenishment since the GEF-2 replenishment in 1998. However, it is important to note that since GEF-2 two new focal areas (land degradation and POPS) have been added to the mandate of the GEF.

Focal Areas/Themes	GEF-4 Allocations	GEF-	GEF-5 Programming Target (millions of USD)		
	(millions of USD	Scenario 1 (\$4.5 billion)	Scenario 2 (\$5.5 billion)	Scenario 3 (\$6.5 billion)	
BIODIVERSITY					
1. Improve Sustainability of Protected Area Systems		700	828	900	
2. Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, seascapes, and sectors		212	235	235	
3. Build capacity for the Cartagena Protocal on Biosafety		50	80	80	
4. Build Capacity on Access to Genetic Resources and Benefit Sharing		50	75	75	
Enabling Activities		50	80	80	
Contribution to Sustainable Forest Management		63	77	130	
Total - Biodiversity	941	1,125	1,375	1,500	
CLIMATE CHANGE					
1. Promote the demonstration, deployment, and transfer of advanced low-carbon technologies		350	400	500	
2. Promote market transformation for energy efficiency in industry and the building sector		300	400	450	
3. Promote investment in renewable energy technologies		350	420	500	
4. Promote energy efficient, low-carbon transport and urban systems		300	350	400	
5. Conserve and enhance carbon stocks through sustainable management of land use, land-use change		100	150	200	
6. Continue to support enabling activities - national communications to the Convention		110	130	140	
Contribution to Sustainable Forest Management		90	110	210	
Total - Climate Change	941	1,600	1,960	2,400	

Table 8: Proposed Indicative Resource Envelopes for GEF-5

Focal Areas/Themes	GEF-4 Allocations	GEF-5 Programming Target (millions of USD)		
	(millions of	Scenario 1	Scenario 2	Scenario 3
	USD	(\$4.5 billion)	(\$5.5 billion)	(\$6.5 billion)
INTERNATIONAL WATERS				
1. Catalyze multi-state cooperation to		150	170	200
balance conflicting water uses in				
basing while considering climatic				
variability and change				
2. Catalyze multi-state cooperation to		200	240	270
rebuild marine fisheries and reduce				
pollution of coasts and Large Marine				
Ecosystems (LMEs) while considering				
climatic variability and change		100	125	125
building portfolio learning and targeted		100	123	123
research needs for joint. ecosystem-				
based management of transboundary				
water systems				
4. Promote effective management of		0	15	40
Marine Areas Beyond National				
preventing fisheries depletion				
with GEF Biodi Focal Area				
5. Undertake pilot-scale demonstrations		0	0	25
of pollution reduction from Persistent				
Toxic Substances (PTS), especially				
endocrine disruptorsjoint with				
Total - International Waters	332	450	550	660
LAND DEGRADATION				
1. Maintain or improve flow of agro-		200	225	250
ecosystem services to sustaining the				
livelihoods of local communities				
2. Generate sustainable flows of forest		25	50	75
including sustaining livelihoods of				
forest dependant people				
3. Reduce pressures on natural resources		175	220	250
from competing land uses in the wider				
landscape				
4. Increase capacity to apply adaptive		20	20	25
management tools in SLM		20	25	60
Management		50	33	00
Total - Land Degradation	279	450	550	660

Focal Areas/Themes	GEF-4 Allocations	GEF-5 Programming Target (millions of USD)		
	(millions of USD	Scenario 1 (\$4.5 billion)	Scenario 2 (\$5.5 billion)	Scenario 3 (\$6.5 billion)
CHEMICALS				
1. Phase out POPs and reduce POPs releases		370	420	470
2. Phase out ODS and reduce ODS releases		20	50	50
3. Pilot sound chemicals management and mercury reduction		20^{30}	40	100
4. National Report to the Convention		40	40	40
Total - Chemicals	319	450	550	660
Total- Focal Areas/Themes	2,812	4,075	4,985	5,880
Corporate Programs	60	70	90	100
Small Grants Program	110	130	150	200
Total - Corporate Programs	170	200	240	300
Earth Fund	56	90	110	150
Non-grants (transformation)	0	0	0	0
Corporate Budget	93	135	165	170
TOTAL-GEF Trust Fund Replenishment ³¹	3,131	4,500	5,500	6,500

247. The corporate budget, which was provisioned at around 3 percent of the replenishment for GEF-4 will be maintained at the same share for the \$5 billion scenario, and drops to 2.6 percent in the \$6.5 billion scenario. The nominal increase in corporate budget is essential for the increased role of the Secretariat in managing corporate programs, including supporting countries to prepare voluntary national GEF business plans, and national communications to the conventions, besides the overall increase in coordination and programming activities resulting from enhanced level of resources in the focal areas.

248. The proposed indicative targets in Table 8 should be reviewed on an annual basis. Depending on the outcome of such review, the CEO of the GEF may adjust the indicative programming targets for focal areas and Corporate Programs taking into consideration the priority programming by focal area and the quality of the pipeline.

³⁰ For mercury only.

³¹ Total allocations for Sustainable Forest Management from biodiversity, climate change, and land degradation are \$183 million, \$222 million, and \$400 million respectively for the three scenarios.

Annex 1: Expected Private Sector Engagement Outcomes for GEF-5

This Annex is intended to include expected private sector engagement outcomes for all the GEF focal area strategies, and is not limited to proposed activities of the GEF Earth Fund.

Climate Change

The proposed goal for GEF-5 in this focal area is to support developing countries and economies in transition towards a low-carbon development path, through the implementation of six objectives. These objectives and their anticipated private sector engagement outcomes are as tabulated below:

Objectives	Expected Private Sector Engagement Outcomes
(i) Promote the demonstration, deployment and transfer of advanced low-carbon technologies	- Technologies successfully demonstrated, deployed and transferred.
(ii) Promote market transformation for energy efficiency in industry and the building sector	 Sustainable financing and delivery mechanisms established. Increased market penetration of energy efficient technologies and products.
(iii) Promote investment in renewable energy technologies	 Increased investment in renewable energy technologies. Increased access to electricity from renewable sources.
(iv) Promote energy efficient, low-carbon transport and urban systems	 Innovative technologies, practices and financing mechanisms introduced. Increased investment in less GHG- intensive transport and urban systems.
(v) Conserve and enhance carbon stocks through sustainable management of land use, land-use change and forestry	 Good management practices in LULUCF adopted both within the forest land and in the wider landscape. Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland. Sustainable financing mechanisms established.
(vi) Continue to support enabling activities and capacity building	 Enabling conditions created for private sector investment, including: access to financing, conducive policy environments, appropriate business models and management skills, sufficient information and awareness, and technological factors.

Biodiversity

The proposed goal for GEF-5 is to contribute to the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services through the implementation of four objectives. These objectives and their anticipated private sector engagement outcomes are as tabulated below:

Objectives	Expected Private Sector Engagement Outcomes
(i) Improve sustainability of protected area systems	 Payment mechanisms for ecosystem goods and services. Private sector participation in sustainable financing plans.
(ii) Mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors	 Sustainable social and economic development around protected areas through SME activities. Certified products from private sector supply chains.
(iii) Build capacity for the implementation of the Cartagena Protocol on Biosafety (CFB)	- Appropriate regulation of safe use and application of biotechnology.
(iv) Build capacity on access to genetic resources and benefit sharing	- Limited at present.

Land Degradation

The proposed goal for GEF-5 is to contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation, through the implementation of four objectives. These objectives and their anticipated private sector engagement outcomes are as tabulated below:

Objectives	Expected Private Sector Engagement Outcomes
(i) Maintain or improve the flow of agro-ecosystem services to sustain the livelihoods of local communities	Small and medium agro-business development Eco-labeling for crops and livestock (organic, sustainably managed, biodiversity friendly) Technology development and transfer (tools, small machinery, irrigation equipment, organic fertilizer, manure management techniques, biogas technology etc). Input and output markets for smallholder producers
(ii) Generate sustainable flows of forest ecosystem services in arid, semi-arid and sub-humid zones, including sustaining livelihoods of forest-dependent people	Technology options for sustainable harvesting and processing of non-timber forest products (e.g. medicinal and cosmetic plants, honey) Eco-labeling and value chains for timber and non-timber products (sustainably managed – e.g. FSC, biodiversity friendly) Technology development and transfer (e.g.

Objectives	Expected Private Sector Engagement Outcomes
	technology related to reduced and low-impact logging, biofuel technology for wood residues etc).
(iii) Reduce pressures on natural resources from competing land uses in the wider landscape	Combination of the above Extractive industries and SLM (mining, forestry) e.g. for off-setting land cover and land use change through TF arrangements for local farmers; PES, especially in watersheds for water services (potential for involving water companies with interest to ensure water quality and quantity) Addressing siltation in dams
(iv) Increased capacity to apply adaptive management tools in sustainable land management	Limited

International Waters

The proposed goal for GEF-5 is the promotion of collective management of transboundary water systems to sustainable use and maintenance of ecosystem services, through the implementation of five objectives. These objectives and their anticipated private sector engagement outcomes are as tabulated below:

Objectives	Expected Private Sector Engagement Outcomes
(i) Build foundational capacity for collective, multi- state engagement of transboundary surface, groundwater and marine systems	- Early engagement of private sector stakeholders in diagnostic analyses.
(ii) Catalyze multi-state and SIDS cooperation to balance competing uses of transboundary surface and groundwater basins while considering climate change and variability	- Innovative solutions demonstrated, with private sector involvement, for reduced water use, reduced pollution, habitat conservation/restoration and sustainable groundwater management.
(iii) Catalyze integrated, ecosystem-based approaches to improved management of large marine ecosystems and their coasts while taking account of climate change and variability	- Innovative solutions demonstrated, with private sector involvement, for reduced pollution, sustainable fisheries and aquaculture and habitat conservation/restoration.
(iv) Support improved management of marine areas beyond national jurisdiction (cooperative pilot with the Biodiversity focal area)	 Introduction of sustainable fishing methods. Certification of food products from sustainable high seas fisheries.
(v) Demonstrate reduced pollution from persistent toxic substances, particularly endocrine disruptors (cooperative pilot with Chemicals FA)	- Pollution prevention for PTS adopted in private sector operations.

Objectives	Expected Private Sector Engagement Outcomes

Chemicals

The proposed goal for GEF-5 is to promote the sound management of chemicals throughout their lifecycle in ways that lead to the minimization of significant adverse effects on human health and the environment, through the implementation of four objectives. These objectives and their anticipated private sector engagement outcomes are as tabulated below:

Objectives	Expected Private Sector Engagement Outcomes
(i) Phase out production and use of controlled chemicals	 Specific POPs or ODS phased out from production. Environmentally sound alternative products, practices and techniques promoted.
(ii) Manage the use of chemicals	 Enterprises implementing ESM for PCBs. PCB-containing electrical equipment covered by ESM and registered.
(iii) Addressing releases of chemicals	- Sustainably reduced or avoided releases of POPs byproducts from industrial sectors.
(iv) Waste prevention, management and disposal and contaminated sites	 PCB-contaminated oils disposed of. PCB-contaminated equipment cleaned and dismantled in environmentally sound facilities. Facilities available, certified and/or registered for environmentally sound disposal of PCBs and.PCB-contaminated oils and parts.

Annex 2: GEF	Corporate	Results	Framework
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STRATEGIC GOALS	Key Expected Results and Targets under \$4.5 billion Scenario	Key Expected Results and Targets under \$5.5 billion Scenario	Key Expected Results and Targets under \$6.5 billion Scenario
1.1 - Strategic Goal 1 Conserve, sustainably use, and manage biodiversity, ecosystems and natural resources globally, taking into account the anticipated impacts of climate change			
Improved Sustainability of Protected Area Systems	Effective conservation and management of 175 million hectares of protected areas	Effective conservation and management of 200 million hectares of protected areas	Effective conservation and management of 225 million hectares of protected areas (of which 50 million will be new marine protected areas)
Sustainably managed landscapes and seascapes that integrate biodiversity conservation increased	Sustainable use and management of biodiversity in 50 million hectares of production landscapes and seascapes	Sustainable use and management of biodiversity in 60 million hectares of production landscapes and seascapes	Sustainable use and management of biodiversity in 60 million hectares of production landscapes and seascapes
Arrested or reversed current global trends in land degradation, specifically desertification and deforestation	Sustainable management of agriculture, range and forest landscapes, including in drylands and affected transboundary areas: 150 million hectares in agriculture 300,000 hectares of forest landscapes 200 million hectares in wider production landscapes 	 Sustainable management of agriculture, range and forest landscapes, including in drylands and affected transboundary areas: 250 million hectares in agriculture 500,000 hectares of forest landscapes 250 million hectares in wider production landscapes 	Sustainable management of agriculture, range and forest landscapes, including in drylands and affected transboundary areas: 350 million hectares in agriculture 1 million hectares of forest landscapes 350 million hectares in wider production landscapes

STRATEGIC GOALS	Key Expected Results and Targets under \$4.5 billion Scenario	Key Expected Results and Targets under \$5.5 billion Scenario	Key Expected Results and Targets under \$6.5 billion Scenario
Catalyzed multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins	Adoption/implementation of national/local reforms in 50% of States and demonstration results in at least 50% of States participating in 7- 8 transboundary water systems	Adoption/implementation of national/local reforms in 50% of States and demonstration results in at least 65% of States participating in 8-9 transboundary water systems	Adoption/implementation of national/local reforms in 60% of States and demonstration results in at least 60% of States participating in 9 transboundary water systems
Catalyzed multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs)	Adoption/implementation of national/local reforms in 50% of States and demonstration results in at least 50% of States participating in 6- 8 LMEs	Adoption/implementation of national/local reforms in 70% of States and demonstration results in at least 50% of States participating in 8-9 LMEs	Adoption/implementation of national/local reforms in 70% of States and demonstration results in at least 60% of States participating in 9-10 LMEs
1.2 - Strategic Goal 2 – Reduce global climate change risks by: 1) stabilizing atmospheric GHG concentrations through emission reduction actions; and 2) assisting countries to adapt to climate change, including variability			
Slowed growth in GHG emissions to the atmosphere from demonstration and transfer of advanced low-carbon technologies and deployment and diffusion of technologies in energy efficiency, renewable energy, and sustainable transport and urban systems	 600 million tonnes of CO₂ equivalent avoided – CC Demonstration of 3-4 innovative technologies in 10-15 countries - CC 0.8 gigawatt new renewable energy capacity installed - CC 	 705 million tonnes of CO₂ equivalent avoided – CC Demonstration of 4-5 innovative technologies in 15-20 countries - CC 1 gigawatt new renewable energy capacity installed - CC 	 1 billion tonnes of CO₂ equivalent avoided – CC Demonstration of 5 - 7 innovative technologies in 20-30 countries - CC 1.3 gigawatt new renewable energy capacity installed -CC
Conserved and enhanced carbon sinks from reduced GHG emissions from Land Use, Land Use Change and Forestry (LULUCF) activities.	$350 - 750$ million tonnes of CO_2 equivalent avoided - SFM	420 – 900 million tonnes of \overline{CO}_2 equivalent avoided – SFM	750 - 1300 million tonnes of \overline{CO}_2 equivalent avoided - SFM

STRATEGIC GOALS	Key Expected Results and Targets under \$4.5 billion Scenario	Key Expected Results and Targets under \$5.5 billion Scenario	Key Expected Results and Targets under \$6.5 billion Scenario
1.3 - Strategic Goal 3 – Promote the sound management of chemicals throughout their life-cycle to minimize adverse effects on human health and the global environment			
Phased out and reduced releases of POPs, ODS, and other chemicals of global concern	12,000 tonnes of obsolete pesticides, including POPs pesticides, disposed of in an environmentally sound manner	12,000 tonnes of obsolete pesticides, including POPs pesticides, disposed of in an environmentally sound manner	15,000 tonnes of obsolete pesticides, including POPs pesticides, disposed of in an environmentally sound manner
	27,000 tonnes of PCBs, PCB-related wastes disposed of, or decontaminated	27,000 tonnes of PCBs, PCB-related wastes disposed of, or decontaminated	30,000 tonnes of PCBs, PCB-related wastes disposed of, or decontaminated
1.4 - Strategic Goal 4 - Build national and regional capacities and enabling conditions for global environmental protection and sustainable development			
Enhanced institutional capacities to plan, develop policies and legislative frameworks for effective implementation of global conventions	 National plans, policies and legal frameworks developed, disaggregated by focal area: 80% of projects meet or exceed their target for a fully operational and effective bio-safety framework – BD 100% of eligible countries receive funding for enabling activities and report to the UNFCCC in accordance with COP guidance – CC At least 50 countries receive support for NIP update - CHEM 80% of GEF supported countries meet their reporting obligations updar the Mantrael Brotectael 	 National plans, policies and legal frameworks developed, disaggregated by focal area: 80% of projects meet or exceed their target for a fully operational and effective bio-safety framework – BD 100% of eligible countries receive funding for enabling activities and report to the UNFCCC in accordance with COP guidance – CC At least 50 countries receive support for NIP update - CHEM 80% of GEF supported countries meet their reporting obligations updar the Montroe Protocol 	 National plans, policies and legal frameworks developed, disaggregated by focal area: 80% of projects meet or exceed their target for a fully operational and effective bio-safety framework – BD 100% of eligible countries receive funding for enabling activities and report to the UNFCCC in accordance with COP guidance – CC At least 50 countries receive support for NIP update - CHEM 80% of GEF supported countries meet their reporting obligations updar the Mantroal Dretacel

Enhanced capacity to monitor and evaluate environmental impacts and trends, and manage knowledgeMonitoring systems established that monitor environmental trends:Monitoring systems established that monitor environmental trends:Monitoring systems established that monitor environmental trends:Monitoring systems established that monitor environmental trends:• Knowledge platforms established to share lessons among CBOs and CSOs across 90 countries – GEF wide• Knowledge platforms established to share lessons among CBOs and CSOs across 90 countries – GEF wide• Knowledge platforms established to share lessons among CBOs and CSOs across 110 countries – GEF wide• Knowledge platforms established to share lessons among CBOs and CSOs across 132 countries – GEF wide• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to climate change, including variability - CC• Monitoring systems in place to track vulnerability to cl	STRATEGIC GOALS	Key Expected Results and Targets under \$4.5 billion Scenario CHEM • 50% of GEF financed projects support priorities in UNCCD 10- year Strategy and national reporting process - LD • 9-10 new transboundary water bodies with Strategic Action Programmes-IW	 Key Expected Results and Targets under \$5.5 billion Scenario CHEM 50% of GEF financed projects support priorities in UNCCD 10- year Strategy and national reporting process - LD 10-11 new transboundary water bodies with Strategic Action Programmes-IW 	 Key Expected Results and Targets under \$6.5 billion Scenario CHEM 80% of GEF financed projects support priorities in UNCCD 10- year Strategy and national reporting process - LD 80% of funded countries submit reports to UNCCD on time - LD 10-11 new transboundary water bodies with Strategic Action Programs-IW
	Enhanced capacity to monitor and evaluate environmental impacts and trends, and manage knowledge	 Monitoring systems established that monitor environmental trends: Knowledge platforms established to share lessons among CBOs and CSOs across 90 countries – GEF wide 50% of GEF projects incorporate emerging knowledge from targeted research projects – LD National forest carbon monitoring systems in place – SLM Monitoring systems in place to track vulnerability to climate change, including variability - CC 	 Monitoring systems established that monitor environmental trends: Knowledge platforms established to share lessons among CBOs and CSOs across 110 countries – GEF wide 50% of GEF projects incorporate emerging knowledge from targeted research projects – LD National forest carbon monitoring systems in place – SLM Monitoring systems in place to track vulnerability to climate change, including variability – CC 	 Monitoring systems established that monitor environmental trends: Knowledge platforms established to share lessons among CBOs and CSOs across132 countries – GEF wide 80% of GEF projects financed take up emerging knowledge from targeted research projects – LD National forest carbon monitoring systems in place – SLM 85% of IW projects incorporate experience sharing/learning –IW Monitoring systems in place to the targeted to the set of the targeted to the set of the targeted to the set of the target to target to the set of the set of the target to target target to target to target to target to target target to target target to target target

STRATEGIC GOALS	Key Expected Results and Targets under \$4.5 billion Scenario	Key Expected Results and Targets under \$5.5 billion Scenario	Key Expected Results and Targets under \$6.5 billion Scenario
Strengthened capacities for management and implementation, including funding for convention implementation	50% of CBD parties that revise NBSAPs integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks	50% of CBD parties that revise NBSAPs integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks	50% of CBD parties that revise NBSAPs integrate measurable biodiversity conservation and sustainable use targets into development and sectoral planning frameworks
	Sustainable financing mechanisms in place at national level, disaggregated by focal area:	Sustainable financing mechanisms in place at national level, disaggregated by focal area:	Sustainable financing mechanisms in place at national level, disaggregated by focal area:
	 80% of projects reduce protected areas funding gap (meeting or exceeding project set targets) – BD \$4.3 billion in investment mobilized – CC \$Value of investment in SLM \$Value of total revenue from carbon markets– SFM 	 80% of projects reduce protected areas funding gap (meeting or exceeding project set targets) – BD \$5.5 billion in investment mobilized - CC \$Value of investment in SLM \$Value of total revenue from carbon markets– SFM 	 80% of projects reduce protected areas funding gap (meeting or exceeding project set targets) – BD \$6.3 billion in Investment mobilized – CC \$Value of investment in SLM \$ Value of total revenue from carbon markets– SFM
Consultative mechanisms established for proactive and constructive engagement of all interested stakeholders	 National coordination mechanisms in place to coordinate GEF's investments in recipient countries: 56 GEF constituency level workshops/meetings organized 32 Country dialogue workshops and seminars organized 60 Constituency meetings 	 National coordination mechanisms in place to coordinate GEF's investments in recipient countries: 56 GEF constituency level workshops/meetings organized 36 Country dialogue workshops and seminars organized 60 Constituency meetings 	 National coordination mechanisms in place to coordinate GEF's investments in recipient countries: 56 GEF constituency level workshops/meetings organized 40 Country dialogue workshops and seminars organized 60 Constituency meetings
	100% of GEF national coordination committees established involve CSOs 100% of submitted voluntary national	100% of GEF national coordination committees established involve CSOs 100% of submitted voluntary national	100% of GEF national coordination committees established involve CSOs 100% of submitted voluntary national

STRATEGIC GOALS	Key Expected Results and Targets	Key Expected Results and Targets	Key Expected Results and Targets
	under \$4.5 billion Scenario	under \$5.5 billion Scenario	under \$6.5 billion Scenario
	business plans represent a consensus view of diverse stakeholders on GEF 5 program priorities	business plans represent a consensus view of diverse stakeholders on GEF 5 program priorities	business plans represent a consensus view of diverse stakeholders on GEF 5 program priorities
	In 132 GEF Small Grants Program	In 132 GEF Small Grants Program	In 132 GEF Small Grants Program
	(SGP) countries National Steering	(SGP) countries National Steering	(SGP) countries National Steering
	Committees and National Focal	Committees and National Focal Groups	Committees and National Focal
	Groups actively participate in national	actively participate in national	Groups actively participate in national
	coordination mechanisms	coordination mechanisms	coordination mechanisms
	80% of projects increase global and	80% of projects increase global and	90% of projects increase global and
	local benefits, meeting project targets,	local benefits, meeting project targets,	local benefits, meeting project targets,
	through effective involvement of local	through effective involvement of local	through effective involvement of local
	stakeholders, including through SGP	stakeholders, including through SGP	stakeholders, including through SGP
	70% of GEF operational focal points	70% of GEF operational focal points	90% of GEF operational focal points
	with increased capacities to manage	with increased capacities to manage	with increased capacities to manage
	GEF 5 programs based on perception	GEF 5 programs based on perception	GEF 5 programs based on perception
	score	score	score

GEF Corporate Results Framework - Effectiveness and Efficiency

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1.1 - Increased and diversified contributions	Target
1.1.1 - Total value of contributions (US\$)	\$X billion
1.1.2 – Number of donors	32
1.1.3 - Actual contributions against pledges	100 %
1.1.4 – Materialized co-financing per dollar of promised co-financing (%)	100 %
1.1.5 Ratio of total GEF resources against co-financing	1 to 4
1.2 - More efficient cost structure	
1.2.1 - Agency fees against total GEF resources	10 %
1.2.2 – Project management fess against total GEF resources	10 %
1.2.3 - GEF Secretariat expenses as % of total expenditures	< 5 %
1.2.4-Total disbursements vs. committed	95 %

Secure financing and financing mechanisms

Enhance visibility of GEF

2.1 - Increased advocacy and political awareness of GEF	Target
2.1.1 - Number of mentions of GEF in traditional media (print) in major countries	Baseline under construction
2.1.2 - Number of mentions of GEF in alternative media (online) in major countries	· · · · ·
2.1.3 – Number of hits on GEF website	· · · · · ·
2.1.4 – Peer review rating of GEF	Baseline from RAF MTR

Improve Efficiencies in Project Cycle

3.1 – Improved timeliness of program design	Target
3.1.1 – Average turn-round response time on request for PIF/PPG endorsement or	10 day service
approval	standard
3.1.2Number of projects over 12 month preparation standard	12 months -
	MSP
 Number of projects over 22 month preparation standard 	22 months -
	FSP
3.1.3 – First PIF submission to Council Approval - FSP	40 days
- MSP	30 days
3.1.4 - Average time from CEO endorsement to first project disbursements	4 months
3.1.5 – Average time for extension of project endorsement date	1 month
3.1.6 - Average time for extension of project closure date	0 months
3.1.7- Percent of PIRs submitted in complete form and meeting deadline	80 %
Quality of Entry

4 - Quality of Entry	Target
4.1- Average time spent to review a FSP PIF from submission to CEO clearance	Calculate baseline in year 1
4.2- Percent of project with outcomes aligned to country programme (national priorities) outcomes, broken down by Full Size project, Medium Size project, Focal area, Region	100 %
 4.3 - Percent of projects with baselines completed at CEO approval/endorsement 	100 %
4.4 - Percent of project with M and E plan in place at CEO approval/endorsement	100 %
4.5 – Percent of projects that include gender analysis	100 %
4.6 – Percent of projects that conduct socioeconomic assessments and analysis	100 %
4.7 - Percent of projects that include climate change risk and vulnerability assessment	90 %
4.8 – Percent of new projects that incorporate learning (evaluation, monitoring, study results) into the design	100 %

Ensure staff, including gender representation

5.1 - Gender sensibility and equality ensured	Target
5.1.1 - Percentage of international professional staff (by gender and geographical distribution):	
 women geographical distribution from developing countries 	50 %
5.2 - Skilled and motivated staff hired and retained	Target
5.2.1 - Average staff satisfaction rating (%) based on survey results	2010 survey baseline
5.2.2 – Annual staff loss rate ³²	10 %
5.2.3 – Average time to fill professional vacancies	

³² Percentage of staff separation and retirements of total staff

Results Driven Implementation

6.1 – Grant Performance Rating	Target
6.1.1 - Percentage of projects that have received good/satisfactory performance ratings	80 %
6.1.2 – Percent of projects that are on track to reach stated objectives	80 %
6.2 – Learning is part of project implementation	Target
6.2.1 – Percent of projects with ongoing learning as reported in the PIR	95 %
6.3 – Efficient Reporting	Target
6.3.1 - Percentage of PIRs that are submitted on a timely basis	85 %

Effective Collaboration

7.1 – Conflicts and complaints resolved successfully on a timely basis	Target
7.1.1 – Percentage of conflict cases reported to the CEO that are resolved successfully	80 %
7.1.2 Percentage of complaint cases reported to the CEO that are successfully resolved	100 %
7.2 - Conflict of Interests standards and public disclosure policy made available to GEF entities	
7.2.1 Standards and policy approved by council; process for implementation put in place	Nov. 2010 June 2011
7.3- Enhanced Partnerships at the global, regional and country levels	
7.3.1 Percentage of projects with collaboration with CBOs and CSOs	80%
7.3.2 Average number of projects implemented by GEF agency, broken down by focal area	Baseline to be established before GEF 5