

2012 STUDY ON FOREST FINANCING

**Advisory Group on Finance
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PREFACE

The attached study and options for forest-related financing have built on previous work by the Advisory Group on Finance (AGF) of the Collaborative Partnership on Forests (CPF) in 2008. The first time forest financing was taken up at the multilateral level was 20 years ago, at the first Earth Summit in Rio de Janeiro, Brazil. A critical standoff occurred in Rio between developed and developing countries on financing for forests. By and large, developed countries said that existing mechanisms were sufficient, while later in 2007 they agreed that forests required new and additional financing. Developing countries have consistently asked for a global forest fund. Countries failed to agree in Rio both on how to address the modalities of a forest institutional structure or to gain a commitment to a global forest fund.

In 2000 the UN Forum on Forests (UNFF) was created. In 2007, a comprehensive agreement was reached on a framework for an international agreement on forests. It was agreed that it was not “legally binding,” but the scope and issues were agreed by the then 192 countries in the United Nations and endorsed by the UN General Assembly. The agreement is now referred to informally as the forest instrument. The other important agreement reached was on four Global Objectives. One of those objectives addresses forest financing explicitly:

“Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management.”

UNFF struggled to address forest financing, and at an extraordinary special session of UNFF in 2009 it was agreed that the Forum would decide on financing for forests, at all levels, for all types of forests and trees outside of forests and from all sources in UNFF10 in 2013. Subsequently, the agreement at UNFF9 in 2011 was that both options of strengthening existing mechanisms and a global forest fund would be addressed. The Forum made it clear that it did not want to continue to argue extreme positions, but to find consensus on what needed to happen, including on using existing mechanisms and consideration of a global forest fund.

Countries are now challenged to do just that. The information provided here gives a strong basis for reaching an agreement on forest finance at UNFF10 in April 2013, which countries agreed to do.

The work by the AGF, led by the UNFF Secretariat, is a far more substantive base of information than was ever provided before. This study identifies the current knowledge on forest finance obtained from multiple sources, local and national government experts, other experts and representatives of multilateral institutions. The study also identifies a number of gaps in information about forest finance, most notably the need to be able to access data on forest finance. The cross-sectoral impacts and impediments to forest finance are still undefined, and information about them is difficult to obtain. In the future, these gaps in knowledge about forest finance from all sources need to be addressed so that countries have an honest overview of where financing is coming from and where it is in decline. The AGF makes some recommendations regarding these and other areas of finance.

There is also a need to access more data for some key tropical forest countries, and a real dearth of information on finance for forests from all sources and at all levels in developed countries. As UNFF is to address all countries and understand all needs, more needs to be done in this regard.

The challenge before all of us is to come to a decision on what can be done in the near term to address finance. Countries cannot afford to wait for the perfect solution. This is a case where the perfect is the enemy of the good. We in the UNFFS have the utmost confidence that countries will rise to the challenge and take concrete step to address forest finance.

We would like to thank the CPF members, in particular the AGF members, for their substantive and useful work on this AGF study. I would also express thanks to Hossein Moeini-Meybodi who led the work in this area, along with other members of our team.

The time for study only is past – we must move to action, while recognizing that more information and data must be collected and analyzed in future.

Carpe Diem!

Jan McAlpine

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- Overall Introduction (UNFF)
- Chapter 1: Forest Financing Flows (UNFF)
- Chapter 2: Existing, New and Emerging Forest Related Financing Mechanisms and Initiatives (CBD)
- Chapter 3: Gaps and Needs in Forest Financing (GEF)
- Chapter 4: Barriers to Sustainable Financing for Forests (GM of UNCCD)
- Chapter 5: Successful Country Examples and Initiatives (FAO)
- Chapter 6: Strengthening Financing for Forests: The Way Forward (UNFF)

The Members of the AGF who contributed to this work are (in alphabetical order):

The Convention on Biological Diversity Secretariat (CBD)

Tim Christophersen
Johannes Stahl

The Food and Agriculture Organization of the United Nations (FAO)

Michael Martin
Eva Muller
Rao Matta
Marco Boscolo

The Global Environment Facility (GEF)

Gustavo Fonseca
Ian Gray

The World Agroforestry Centre (ICRAF)

Frank M. Place

The International Tropical Timber Organization (ITTO)

Amha Bin Buang
Takeshi Goto

The United Nations Convention to Combat Desertification Secretariat (UNCCD)

Elisabeth Barsk (GM)
Sergio A. Zelaya-Bonilla
Ms. Jasmin Metzler
Laura Schweitzer Meins (GM)

Sven Walter (GM)

United Nations Development Programme (UNDP)

Charles Mcneill

United Nations Environment Programme (UNEP)

Mario Boccucci

Niklas Hagelberg

The United Nations Framework Convention on Climate Change Secretariat (UNFCCC)

Jenny Wong

The United Nations Forum on Forests Secretariat (UNFF)

Hossein Moeini-Meybodi

Thida Sam

Peter Gondo

Jones Kamugisha-Ruhombe

Ivan Tomaselli

The World Bank

Peter Dewees

Tuukka Castren

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ABBREVIATIONS AND ACRONYMS

AF	Adaptation Fund
ABS	Access and Benefit-Sharing
ACP	African, Caribbean and Pacific Group of States
ADB	Asian Development Bank
AfDB	African Development Bank
AGF	Advisory Group on Finance of the Collaborative Partnership on Forests
AHEG	Open-Ended Intergovernmental Ad Hoc Expert Group on Forest Financing
A/R	Afforestation/Reforestation
AWG-LCA	Ad Hoc Working Group on Long-Term Cooperative Action under UNFCCC
BTFEC	Bhutan Trust for Environmental Conservation
BOVESPA	São Paulo Stock Exchange
CBD	Convention on Biological Diversity
CBFF	Congo Basin Forest Fund
CBFG	Community-Based Forest Group
CBO	Community-Based Organization
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CFU	Carbon Finance Unit
CI	Conservation International
CIF	Climate Investment Fund
COP/CBD	Conference of the Parties of the Convention on Biological Diversity
COP/UNFCCC	Conference of the Parties of the UN Framework Convention on Climate Change
COMACO	Community Markets for Conservation
COMIFAC	Central African Forests Commission
CPF	Collaborative Partnership on Forests
CSO	Civil Society Organization
DDI	Domestic Direct Investment
DRIP	Dividend Reinvestment Plan
ECOSOC	Economic and Social Council
ECOWAS	Economic Community of West African States
EIB	European Investment Bank
EST	Environmentally Sound Technology
ETS	European Union Emissions Trading System
EU	European Union
EUR	Euro
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FDI	Foreign Direct Investment
FIELD	Financial Information Engine on Land Degradation of the UNCCD
FIP	Forest Investment Program
FLEG	Forest Law Enforcement and Governance
FLEGT	Forest Law Enforcement Governance and Trade
FONAFIFO	National Forestry Financing Fund (Costa Rica)
FP	Facilitative Process of the UNFF
FRA	Forest Resources Assessment of the FAO
FUNDESNAF	Foundation for the Development of the National System of Protected Areas (Bolivia)
FY	Fiscal Year
GCF	Green Climate Fund
GDP	Gross domestic product
GEF	Global Environment Facility
GGW	Great Green Wall to stop desertification in the Sahel region of Africa
GHG	Greenhouse Gas
GIS	Geographic Information System
GM	Global Mechanism of the UNCCD

GOF	Global Objectives on Forests
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
ICMS	Imposto sobre Circulação de Mercadorias e Serviços (Brazilian value added tax)
IDA	International Development Association
IFAD	International Fund for Agriculture Development
IFC	International Finance Corporation
IFM	Improved Forest Management
IFS	Integrated Financing Strategies
IIF	Integrated Investment Framework Strategy
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature
IWG-IFR	Informal Working Group on Interim Finance for REDD+
JI	Joint Implementation
LAC	Latin America and the Caribbean Region
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LFCC	Low Forest Cover Country
LIC	Low Income Country
LMIC	Lower Middle Income Country
LULUCF	Land Use, Land Use Change and Forestry
MDB	Multilateral Development Bank
MDG	Millennium Development Goal
MEA	Multilateral Environmental Agreement
MFI	Microfinance Institution
MoI	Means of Implementation
MRV	Measurement, Reporting, and Verification
NAP	National Action Plan
NAPA	National Adaptation Programme of Action
NFF	National Forest Fund
NFFS	National Forest Financing Strategies
nfp	National forest programme
NFPF	National Forest Programme Facility
NGO	Non-Governmental Organization
NICFI	International Climate and Forest Initiative of Norway
NWFP	Non-Wood Forest Products
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OTC	Over-the-counter Transactions in voluntary carbon markets
PBA	Programme-Based Approaches
PES	Payments for Ecosystem Services
PINFOR	Programa de Incentivos Forestales (Guatemala)
PPCR	Pilot Program on Climate Resilience
PROFOR	Program on Forests of the World Bank
PRSP	Poverty Reduction Strategy Paper
PSA-H	Payments for Hydrological Services (Mexico)
PWS	Payments for Watershed Services
RDB	Regional Development Bank
REDD	Reduced Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation, and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks

REDDES	Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests Programme
REIT	Real Estate Investment Trust
RMB	Renminbi (China)
RPG	Regional Public Goods Program
SCCF	Special Climate Change Fund
SCF	Strategic Climate Fund of the Climate Investment Funds
SECCI	Sustainable Energy and Climate Change Initiative Fund
SFM	Sustainable Forest Management
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SME	Small- and Medium Enterprises
SWAp	Sector-Wide Approaches
TEEB	The Economics of Ecosystems and Biodiversity
TIMO	Timberland Investment and Management Organization
TNC	The Nature Conservancy
TPP	Timber Procurement Policy
UMIC	Upper Middle Income Country
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
USD	United States Dollar
VAT	Value Added Tax
VCS	Voluntary Carbon Standard
VPA	Voluntary Partnership Agreements
VRD	Voluntary REDD+ Database of the REDD+ Partnership

KEY POINTS OF THE 2012 AGF STUDY ON FOREST FINANCING

1. Information continues to be more limited on domestic public and private forest finance than that of the external sources.
2. The global need for funding for sustainable forest management is estimated to be between USD 70 and USD 160 billion per year. Globally, resources remain insufficient to address all seven thematic elements of SFM in a balanced way, as defined in the forest instrument.
3. Most countries are unable to raise adequate public funds for the forest sector, and re-investment of revenues in forest management has been minimal.
4. Conversion of public forest institutions into semi-autonomous commercial enterprises has been used to improve self-financing from the forest sector. Another trend is establishment of national forest funds for the mobilization of additional funds from other sources.
5. ODA disbursements increased by an average of 125% between the periods 2002-2004 and 2008-2010, largely due to REDD+ related financing. Thus, the fourth Global Objective on Forests, to the extent that it deals with ODA, has been achieved.
6. High forest cover countries (HFCCs) have received the majority of forestry ODA. But most HFCCs with lower rates of deforestation, low forest cover countries (LFCCs) and small island developing states (SIDS), trees outside forests, and plantations do not receive adequate funding. LFCCs and SIDS continue to experience decreases in forestry ODA.
7. The private sector including forest communities, smallholders, industry and other investors is a key source of finance for forests, mostly through investments in forests managed for wood production. New private investors generally come from outside the forest industry, and seek suitable combinations of financial returns and risk levels.
8. Smallholders have limited access to finance compared to large producers. Sustainable management of natural forests receives limited financing compared to that of planted forests and protected areas.
9. Existing, new and emerging forest related financing mechanisms have provided significant resources that are linked mainly to climate change, and to a lesser extent to biodiversity.
10. The potential for REDD+ to contribute to forest financing is large, estimated at as much as USD 6.2 billion per year in 2020. Around USD 4 billion was pledged for the period 2010–2012. Apart from REDD+, however, many of the other carbon-related initiatives have no or negligible activities on forests.
11. PES schemes are not yet broadly applied and require enabling policy frameworks as well as development of market and non-market financing mechanisms.
12. Obstacles to the mobilization of forest finance also include inadequate enabling conditions, insufficient capacities, donor and investor concerns about governance, insecure tenure, illegal activities, problems associated with eligibility and complex procedures to access to external resources. Sometimes inefficient use of the existing resources has further exacerbated the problem.
13. No single solution can address the need for forest financing. A mixture of measures should be undertaken at all levels simultaneously.

14. Success in forest finance stems mainly from strong political support; good systems of governance; efficient, robust and flexible implementation; and involvement of forest communities and other stakeholders.
15. National forest financing strategies should target raising additional financing and more efficient use of resources as well as connecting with relevant sectors and programme objectives with the forest sector.
16. Improving statistics and data collection on financing flows to sustainable forest management and related issues at all levels is essential for making systematic progress. Multiple mechanisms under the NFPF, UNFF, CCD, CBD, FAO/PROFOR and others, as well as the CPF online sourcebook, should be strengthened to improve data collection and access.
17. Implementation of the forest instrument has to be strengthened at all levels. To enhance transparency of international public financing for forests, a "Rio marker" for funding addressing the forest instrument and its four Global Objectives on Forests should be established.
18. International and regional organizations and processes should enhance inter-regional and intra-regional cooperation on forest financing by sharing relevant experience, knowledge and expertise.
19. The GEF6 replenishment (2014-2018) could further expand the GEF SFM/REDD+ Strategy to include a new GEF focal area specifically on forests.
20. Access to resources of the existing forest-related financing mechanisms can be further improved by adjusting public sector financing criteria and streamlining the relevant procedures.
21. Consideration could be also given to strengthening existing forest-related financing mechanisms and devoting a new fund or funds for SFM to address the needs and gaps that are not yet addressed by the existing mechanisms.

EXECUTIVE SUMMARY

1. Forests are highly significant for addressing multiple global challenges and contribute to the sustainable development of all countries, even those without significant forest area. Forests contribute approximately USD 468 billion or 1% of global gross value added to GDP. The livelihoods of over 1.6 billion people depend on forest goods and services for subsistence. The provision of adequate and sustained financing for forests is, therefore, of utmost importance to ensure a continued supply of the wide array of forest products and services to societies, while reducing ecological degradation including reducing effluents, emissions and waste.
2. The 2012 Study on Forest Financing expands and updates the 2008 study and provides a systematic and objective analysis of funding sources and gaps among and within thematic areas, geographic regions, country groups and individual countries, through a review of existing, emerging and evolving funding sources and mechanisms.
3. As was the case in 2008, the available information on domestic flows for forest financing continues to be more limited than that of external sources. Few analyses exist on aggregate national trends in forest financing. This is mainly due to differences in reporting and analyses, varying national priorities given to domestic forest resources, outdated data and surveys, and the fact that the information collected is often lumped together with flows to other related sectors.
4. Lack of data is also exacerbated by the fact that forest services and non-wood forest products are often not included in the calculations, as their values are often not factored in the market while sales values of timber are factored in. In addition, identifying and following finance flows in some countries, such as low forest cover countries (LFCCs), can be extremely difficult as there are no clearly defined structures for financing mechanisms, even in countries with operational national forest departments.
5. In this context, it is more feasible to examine trends in data on forests that have been consistently and systematically collected and reported, though they are largely external and not domestic sources of financing. These include official development assistance (ODA) flows and to a lesser extent national information, national forest programmes and other similar sources.
6. Forest ownership structures, forest quality, the extent of forest cover and designated functions of forests impact the domestic and external flows of finance to forests. In general, where governments own forests and thus are required to provide related finance, revenues are generally not sufficient due to the small budgets allocated to state forest agencies. Where forests are owned by the private sector, public support is needed for investments in activities that would not otherwise be financed by the private owners/investors due to low profitability or distant cash flows. Smallholders in particular face difficulties in this respect, due to the size of their properties and the reliability of revenue flows combined with more limited networks and knowledge of the various regulations and opportunities.
7. Countries in Africa and Asia tend toward predominantly public ownership of forestlands, whereas countries in Europe and North and South America are characterized by more private

owners. Oceania, as well as many countries in the Caribbean, tends towards predominantly private ownership of forestlands.

8. High forest cover countries tend to exhibit forest landscapes with less fragmented forest cover, resulting oftentimes in more productive forests as measured by biodiversity, ecosystem services, carbon sequestration, and so forth. Those high forest cover countries with high deforestation rates have greater potential to benefit from funding opportunities for REDD+, PES, A/R, and more.

9. As of 2010, the primary designated functions of forests tended toward production activities, with the notable exception of the Caribbean whose primary forest functions were soil and water protection. Biodiversity conservation was a significant function in all regions, particularly in Central America, and the importance of soil and water protection varied among regions, in particular in Asia and the Caribbean. Notably, social services did not report strongly as a primary designated function.

National Financing Flows

10. Forest financing is heavily reliant on internal cash flows, and therefore is a predominantly domestic phenomenon in many countries. Domestic public sector financing is the major source of financing for forest-related activities in many countries, and is generally derived from general government revenue and revenues generated from state owned forests. The status and type of funding for forests vary among countries, as do funding structures and supported activities.

11. The public sector contribution plays an important role in forest financing, as it is often the only source of funding for forestry activities focused on social and environmental benefits. With close to 80% of the world's forests publicly owned, funds garnered through political means can also serve an important leveraging function to boost private sector investments.

12. However most countries are unable to raise adequate domestic public funds for the forest sector, as forests have been treated as quick sources of revenue with minimal re-investment into the management of forests.

13. In many countries forestry activities also receive funds through ministries which host a range of other portfolios including rural development, wildlife, fisheries, tourism, water, nature conservation and monuments, which may overshadow the role that the forest sector can play in contributing to these portfolios. Low allocations to the forest sector may be partly due to the competition for funds among the various sectors.

14. Converting public forest institutions into semi-autonomous commercial enterprises that are empowered to retain all the revenues they generate, and establishing national forest funds as part of national forest programmes or as windows under national environment funds, are among several measures some countries have taken to enable public forest institutions to retain and manage funds effectively.

International Public Financing

15. This study has relied almost exclusively on data provided by the Organisation for Economic Co-Operation and Development (OECD), which provides only a partial view of the funding directed towards forests due to more stringent guidelines in reporting, including the tracking of flows to “forestry” rather than to “forests” in general. The OECD data, however, are highly useful and informative due to the regularity and consistency of data collection over time.

16. Accordingly, ODA disbursements are characterized by an overall 125% increase between the averaged periods 2002-2004 and 2008-2010. While the percentage of multilateral disbursements compared to bilateral disbursements remains at approximately 75% for both averaged periods, the increase in multilateral disbursements is slightly larger than that of the bilateral counterpart (138% increase for multilateral disbursements compared to 117% for bilateral).

17. This significant increase in both bilateral and multilateral commitments and disbursements is due in large part to REDD+ readiness activities, as well as its pilot programmes including fast-start funding. This indicates that the Global Objective on Forests Goal 4, to the extent that it deals with ODA, has been achieved.

18. The majority of the top recipients of forestry ODA are middle-income countries. In fact, 83% of these countries are within the range of lower-middle income, upper-middle income and even high-income classifications. Some 17% of top recipients are low-income countries.

19. Overall, the majority of forestry ODA goes to middle-income countries and high forest cover countries (42%), or to medium forest cover countries. This trend further exacerbates difficulties in financing forests in many low-income and/or low forest cover countries.

20. Analysis of ODA for LFCCs and SIDS shows no major change compared to what was reported in the 2008 study. These countries continue to experience decreases in forestry ODA. In addition, distribution of the limited ODA flows among these countries is highly uneven. Despite the level of forest cover, forestry ODA in these countries plays a catalytic role, in particular in promoting markets for non-wood forest products (NWFPs).

Private Sector Financing

21. Private sector investments are mainly directed toward forests managed for wood production from both natural forests and plantations. In a few cases private sector investments made in timberlands for wood production are later converted into conservation areas for protection or ecosystem services, or to other land uses. There are also private investments in non-wood forest production, but they are less significant.

22. New investors are oftentimes institutional investors such as pension funds and others, Timber Investment and Management Organizations (TIMOs) and other private investors. The new investors generally come from outside the forest industry, and have little connection with the forest sector. TIMOs invest mostly in pine, eucalypt and teak plantations to sell wood in the

open market. These investments are relatively easily identified and quantified, given the magnitude of resources involved, but few comprehensive analyses have been undertaken to date.

23. Systematic studies related to finance flows in the private sector have begun to emerge in recent years, particularly those related to carbon markets and other mechanisms related to the value of the services forests provide. There is still a need for extensive coordinated efforts to collect and extract national data on the private sector's investments, as such data are not easily identified in a comprehensive manner.

24. At the regional level, private investments contributed 64% of the total identified sources of forest financing in the Latin America and the Caribbean region and totaled an average of almost USD 4.4 billion per year between 2006 and 2011. The main private investors in forestry are pulp and paper companies planting predominantly eucalypt and pine for their own industrial supplies. In places like Africa and Asia there is a growing trade, most of which occurs in the informal sector and thus is rarely captured in national trade statistics.

25. In Africa, large private sector companies are mostly active in integrated processing industries and plantation forests. Despite the adoption of economic liberalization policies, many countries in Africa have limited domestic, large-scale, formal private sector participation in forestry, particularly in the areas meaningful to sustainable forest management.

26. Investments in small to medium scale forest enterprises have been promoted and directed more towards harvesting indigenous forest concessions and related timber value chains, small scale saw milling from plantation and indigenous forest ecotourism in forest protected areas.

27. A variety of microfinance institutions (MFIs) have emerged over time in Africa. It is estimated that there are now over 970 MFIs serving 27 million microfinance client accounts in Africa, representing about 4% of the population.

28. Small and medium forest enterprises and forest smallholders face additional challenges with regard to accessing private sector finance because of their remote and rural locations. This makes it more costly to provide services to these stakeholders and isolates them from one another and from the marketplace. The findings of this study confirm that smallholders have limited access to finance compared to large producers. Sustainable management of natural forests receives limited financing compared to planted forests and protected areas.

29. The associated Community-Based Forest Groups (CBFGs) have the capacity to increase their contribution to forestry development. There is evidence that, with a little support and improved security of tenure, smallholder farmers can mobilize massive investment into forestry, especially regarding plantations and trees outside forests. This has already been amply demonstrated by some smallholder farmers who are investing in woodlots and small plantations, especially in east Africa.

30. These investments are made possible by the adoption of favorable policies and legislation that allow smallholder farmers to benefit from the forests and trees that they plant and manage. Favorable trade and industrial policies that allow for the growth of forest industries and markets

for forestry products are also critical. In addition, it is important to improve access to finance, especially credit, for the smallholder farmers to be able to augment their own savings and invest in forestry activities.

31. Philanthropic funding represents a significant source of forest financing in some countries and regions. For example, during the period 2001-2010 the investments of the main philanthropic organizations in forest programmes/projects achieved an average of USD 47 million per year in LAC.

32. The sustainability and predictability of philanthropic grants from the private sector are difficult to estimate and downturns in the global economy will likely impact the level of investment from philanthropy negatively. Although private philanthropy is unlikely to deliver finance at the same scale as other sources of private finance, it can be used for activities that offer no or low returns on investment. Most NGOs rely mostly on international donors and philanthropic organizations for funding.

Existing, New and Emerging Forest Related Financing

33. Significant resources have been made available through existing, new and emerging mechanisms to issues that are closely connected to forests, across and within different countries and regions in recent years.

34. The Rio Conventions have relevant forest activities and financing initiatives, limited to the objectives and activities within those conventions. A large part of new financing initiatives that have some relation with forest-related projects, outside the private sector, are linked mainly to climate change, and then to biodiversity.

35. Forest carbon and forests' contribution to climate change mitigation and adaptation has been one of the main driving forces behind financing climate change forest-based activities during recent years. The potential for REDD+ to contribute to forest financing is large, estimated at as much as USD 6.2 billion in 2020, and has led to unprecedented attention to the carbon potential of forests, in particular through REDD+ schemes. Around USD 4 billion were pledged for the period 2010–2012 for measures to reduce greenhouse gas emissions from deforestation and forest degradation in developing countries. At the global level, institutions such as GEF, World Bank, UN-REDD, and REDD+ Partnership are active in this field.

36. Apart from REDD+, whose focus is on the carbon content of forests, many of the national, regional and international carbon initiatives have no or negligible activities related to forests, although activities related to efficiency and electrification within these initiatives might have positive impacts on forests.

37. Forest-based carbon markets and trading schemes are still relatively new and are not yet well established. There is however broad optimism regarding the potential for carbon trading schemes to provide a new revenue source for forest landowners and rights-holders, and employment opportunities for those involved in carbon market related projects. REDD+ related initiatives are credited with much of the voluntary carbon market growth in 2009 and 2010. The

majority of suppliers in voluntary carbon markets are from the private sector, followed by non-profit organizations and the public sector.

38. The contribution of forests to combating land degradation and desertification also offers an important financing opportunity for many countries. The investment in these areas is attractive to national governments due to the support of sustainable production systems that in turn benefit a large number of land users. These efforts are often at the nexus of current land use decisions where forests are vulnerable to loss and degradation but have the potential to enhance sustainability and resilience of ecosystem service flows.

39. New developments within the three Rio Conventions have undoubtedly created new resources for forests, with much of the additional funding directed to or in support of meeting the overall objectives of the these Conventions, namely: UNFCCC, CBD and UNCCD. These resources are of direct or significant relevance to forests and address the range of services and benefits derived from forests. This increases overall recognition of the significance of forests for tackling a number of global challenges, and for the success of other sectoral and cross-sectoral policies and actions at the national and global levels.

40. However, this has also led to an unintended situation in which mostly carbon, biodiversity and land services of forests are taken into account while other aspects of sustainable forest management receive limited or no funding. There is still a lack of recognition of the significance of the multiple functions and dimensions of sustainable forest management as a standalone issue at the global level as well as national levels. The significant flow of finance that targets the carbon content of forests has led to a focus on predominantly high forest cover countries with high rates of deforestation, leaving out those high forest cover countries with lower rates of deforestation, low forest cover countries and SIDS, trees outside forests, and plantations from receiving proper funding under the relevant schemes.

41. New and innovative market-based sources of finance are being developed in many countries, including for example PES schemes, bioprospecting, eco-tourism, greening commodities and complementary biodiversity payments in REDD+. Many of the innovative financing mechanisms require policies that recognize and value the vital environmental services forests provide. These financing mechanisms also require broader enabling frameworks that ensure reinvestment of monetary benefits back into the forest sector. Socio-economic valuation of forests is also needed make it possible to determine economic returns and to include them in the investment agreements and political decision-making.

42. Reviews caution against the assumption of the global applicability of PES mechanisms. The most important source of payments for services is still international governmental and non-governmental support. Due to various national legislative frameworks and laws, the way PES is approached and executed varies from one country to another. Moreover, further analyses are necessary to explore the wide range of potential services and consumers of PES for forests.

Needs and Gaps in Forest Financing

43. Despite various initiatives and efforts to increase financial resources available for SFM, especially in developing countries where the bulk of natural forests are found (and where there are high rates of deforestation), the resources remain insufficient. Both developed and developing countries face multiple challenges that have increased the pressures to address multiple competing priorities, with limited resources. For developing countries, the situation is more serious.
44. Financial resources are often insufficient to properly manage vast forest areas. Those forest areas not used for production are rarely self-financing, and subsidies and/or direct action by governments are required to manage these areas properly. Inefficient use of the existing resources has further exacerbated these problems.
45. It has been estimated that globally the required funding for sustainable forest management is between USD 70 and USD 160 billion per year. Estimates of the amounts required to halve deforestation alone range from USD 20 to USD 40 billion per annum by 2020. Between USD 4 and USD 7 billion per annum would be needed by 2015 to reduce deforestation by 25%.
46. These are only estimates but they are useful in highlighting the fact that the funding available for forests from all sources falls far short of even the most conservative estimated needs. This is especially true if we go beyond the carbon value of forests and consider financing all seven thematic elements of SFM, and financing SFM as defined in the forest instrument.
47. The lack of forest finance also stems from countries' inability to quantify and capture the full revenue-generating potential of forests and the considerable forest-related financing flows in other sectors. Continued effort is needed to ensure that the full value of forests is recognized and integrated into the work of various conventions, international organizations and countries.
48. There is a lack of reliable data on forest funding. The lack of information is a major barrier to improved understanding of the true costs associated with the management of all types of forests and the potential for forests to contribute to local, national and regional development. Appropriate guidelines and templates should be also developed to help countries to report more clearly on forest financing. This also requires strengthening technical and technological capacities of countries.
49. In relation to global forest finance, good forest governance and law enforcement are important factors. Funding associated with forest law enforcement and trade remains relatively limited. There remains a general lack of awareness among legislators and policy makers about the role of forest law enforcement and governance in national development, resulting in a lack of political will to support the sector. Poor governance and limited law enforcement are likely to make the forest sector less attractive to investments by the private sector by posing unacceptable levels of risk. In many countries, clear policies for allocating public funding to forests are lacking, and when policies exist these are weak and unreliable, resulting in significant gaps between estimated resource needs and actual funding allocated. In many cases the limited

allocation of budget resources to the forest sector can be attributed – at least in part – to the sector’s failure to make a convincing case for an increased share of resources. Expenditures on forests are largely pegged at a holding or maintenance level and do not provide for forest development, conservation and management.

50. There is also a strong need for improving the capacity of different stakeholders and for promoting technology cooperation at different levels. This will strengthen the ability of various stakeholders to take advantage of the existing opportunities for forest financing.

51. Improving forest financing in LFCCs and SIDS requires a strategic approach to the full potential of forests for these countries and inclusion of cross-sectoral, cross-institutional policies that embrace all values of forests, including land management, agriculture, water, energy, climate and the environment.

Barriers

52. There are several key barriers that hinder access to and mobilization of additional financing for forests from all sources. An inadequate enabling environment is generally considered to be the primary underlying obstacle to the mobilization of finance. Such enabling conditions are necessary for both private investment and public sector funding, in particular for attracting external funding. The elements include (1) policy and legislative frameworks, (2) knowledge, (3) national capacity development and institutions and (4) markets and private sector mechanisms and instruments.

53. A high level of technical and technological capacity and knowledge is a critical component of enabling environments. Communication and financial capacities are also essential to the ability to articulate the importance of forests to those outside the sector, and particularly to those in the business and finance sectors. In many countries however, sufficient capacities are lacking in a range of categories. This may result in a low level of priority given to forests by national level governments, funders and others due to a lack of understanding about the significant contribution of forests to achieving sustainable development.

54. The forest sector is not widely understood as being relevant to achieving sustainable development goals despite forests’ integral role in safeguarding overall landscape multi-functionality. The forest sector in some countries continues to struggle with developing and implementing coherent strategies for sector planning, leading to forest policy priorities that are poorly aligned with other sector’s priorities and broader sustainable development strategies. Significant forest governance and legality challenges continue to undermine financing mobilization efforts due to donor and investor concerns about insecure tenure, illegal activities and a variety of other risk factors.

55. A lack of effective public sector laws, such as those providing tax incentives or clarifying forest tenure and safeguarding the resource access rights of local people, can discourage private sector investment and may drive unsustainable forest management practices. Additionally, if existing legal mechanisms are poorly designed, implemented and/or enforced, this can also act as a barrier to forest financing.

56. Local and sub-national forest stakeholders are a critical element in determining the health and condition of forests and the resources therein, yet they are frequently unable to access and secure the financing needed for SFM, enterprise development and capacity building activities. Problems associated with eligibility, extensive procedural requirements and coordination of priorities to access to external resources can create barriers to forest financing.

57. There is no single solution that can eliminate all the existing barriers. Instead, a multi-pronged approach is needed that focuses on (1) undertaking a thorough examination of the needs and contexts of an area and its people, (2) developing a ‘long view’ strategy that is context appropriate and politically viable, and (3) continuing and improving step-by-step actions to establish a strong enabling environment within countries, regions and at the global level.

Success Stories

58. Some regions and countries are paying increasing attention to the fact that investing in forests in creative ways can help to achieve sustainable development goals. These innovative ways include, for example, combating land degradation through massive afforestation in China; mitigating climate change through reduced deforestation in Indonesia; encouraging conservation through payments for ecosystem services in Brazil and Mexico; and formulating joint resource management strategies with communities in Africa. In all these cases, countries have wisely articulated how forests could contribute to a wide array of broader development objectives and priorities: from poverty alleviation and provision of safe drinking water to climate change mitigation and adaptation. Across many countries, forests now have become a key part of securing a sustainable future for them.

59. Work to rebuild the natural resource base in rural areas is seen by many countries as a major step in moving towards greener, more equitable, and sustainable economies. Payments to protect watersheds, biodiversity, and landscape beauty are becoming more widespread. Many countries have also started to help shape new markets and investments through mechanisms such as insurance support, price and purchase guarantees, and promoting public-private and private-private partnerships.

60. Case studies reveal positive and successful accounts of leadership, dedication, and innovation – initiatives that can inspire and motivate others. Underlying factors of motivation and success include strong political support; good systems of governance; efficient, robust and flexible implementation capacities; and well-defined community involvement. Good governance is observed to improve the efficiency and effectiveness of implementing a broader policy initiative, including ensuring opportunities for justice and fairness at each stage of the process.

61. Inherent in these examples is also the message that opening up the forest sector to a wider range of actors and stakeholders benefits it in the long run. A shared vision among different actors on the roles, functions and methods of forest financing is particularly needed at the national level. The examples also demonstrate that funding for forests can increase when forest policies are aligned with other political priorities.

62. The case studies also indicate that it is essential to actively involve the poor, marginalized people, indigenous communities, and local governments in resource management and share with them the benefits of increased investments and incomes. Local communities need strong incentives to assume greater responsibilities and make stronger commitments. Proactive policy incentives and institutional measures such as formation of forest cooperatives and self-help groups, and development of small and medium local enterprises, are essential to providing a true incremental benefit to these groups.

The Way Forward

63. Significant progress has been made at the national, regional and international levels in enhancing the contribution of forests to long-term sustainable development. There is better and wider understanding of sustainable forest management, and there is now agreement on the forest instrument as a comprehensive instrument on forests containing the four global forest objectives. In addition forests have been integrated into the work of several multilateral environmental agreements.

64. Progress has also been made in terms of forest law enforcement, governance and related trade as well as in applying voluntary market based mechanisms. The importance of forests in mitigating and adapting to climate change and in hosting the vast majority of terrestrial biodiversity, among other major functions, is increasingly acknowledged. Some countries provide good examples of how forests can become a centrepiece in this transition.

65. The full range of forest goods and services needs to be better recognized, including through payments for ecosystem services, so that they may be internalized in GDP figures. This would strongly contribute to raising the visibility of forests and including them in the political agenda. Sustainable forest management outside protected areas also generates global public goods that need to be compensated.

66. In some cases the term “sustainable” in SFM has come to be interpreted as a focus on only the environmental benefits of forests since Rio. By developing more substantive data on the economic and social functions of forests in the landscape, there is a stronger likelihood that the payments for those goods and services will be more effectively addressed in country budgets, and in leveraging both public and private financing.

67. To strengthen and mobilize resources for forests at the national level, actions have to be taken to improve policy, legislative and institutional frameworks. It is also necessary to provide a platform for engagement of various stakeholders including the private sector, and to cooperate on strengthening technical and technological capacities of countries.

68. National forest financing strategies should work in a holistic fashion in two ways: (1) by capitalizing on the linkages with connected sectors and programme objectives (agriculture, water, energy and climate change for example), and (2) by recognizing the importance of trees outside forests and the reciprocal relationship between those trees and forests.

69. The development and incorporation of national forest funds into national forest financing strategies as instruments of forest policy is another effective option for addressing sector financing needs.

70. Regional organizations and processes have significant potential in leveraging and mobilizing funds for forests, and can help countries to address sustainable forest management challenges in general, and financing of forests in particular. They should help countries to catalyze the preparation of national forest financing strategies, explore forest financing opportunities, bridge gaps and help countries to ensure consistency between national and global policies on forest financing, and enhance inter-regional and intra-regional cooperation on forest financing by sharing relevant experience, knowledge and expertise.

71. Implementation of the forest instrument, as the only globally agreed framework on forests that provides a comprehensive set of actions to promote the sustainable management of all types of forests at all levels, has to be strengthened at all levels. Implementation of this instrument should be also mainstreamed into the programme of work of various forest-related financing mechanisms, organizations and initiatives at national and international levels.

72. At the international level, for example, the GEF SFM/REDD+ Strategy recognizes the seven thematic elements of the SFM, as stipulated in the forest instrument, and also refers to the forest instrument and the four global objectives on forests. This programme has the potential to be further developed to specifically contribute to the implementation of the forest instrument and its national reporting. The next GEF replenishment (GEF6, 2014-2018) is a good opportunity to further expand this programme and agree on it as a new GEF focal area, specifically on forests.

73. There is a clear need to strengthen mechanisms and processes with a focus on collecting national data on forest financing, including in the implementation of the forest instrument. A number of programmes, frameworks and tools are emerging as a basis for gathering much needed information. These would also allow a means through which analyses of gaps and opportunities within the forest sector can be identified and addressed at local and national levels. However, support and leadership are required to ensure wide uptake.

74. Given the importance of forests to achieving the objectives of all three of the Rio Conventions, consideration should be given to establishing a "Rio marker" for forest funding addressing the forest instrument and its four Global Objectives on Forests.

75. The reporting mechanisms under the UNFF and NFPF as well as data collection mechanisms under UNCCD and CBD can be extremely beneficial to improving access to accurate and missing data. Similarly, the Convention on Biological Diversity has an online sourcebook with information on funds related to forest biodiversity.

76. The Collaborative Partnership on Forest's online Sourcebook also provides a searchable database of funding sources, policies and delivery mechanisms. More effective coordination of these efforts across the UN system would help countries to access this information, including by moving to innovative social and technological mediums to communicate this data. CPF member organizations could be instrumental in collecting data on forest finance by designating lead

agencies to collect specific data, according to the mandate of each member. It is equally important to also gather data on cross-sectoral financing that goes to forests.

77. The Framework for Assessing and Monitoring Forest Governance developed by FAO/PROFOR and PROFOR's guidance on the execution of forest sector public expenditure reviews also provide a sound source of basic information. These can also allow a means through which analyses of gaps and opportunities for forests can be identified and addressed at the local and national levels.

78. Countries have struggled for a long time to find a suitable solution to address the challenge of forest financing at the global level. The debate has centered around two main mutually non-exclusive options: (1) strengthening existing forest financing related mechanisms and (2) the establishment of a voluntary global forest fund.

79. Strengthening of the existing forest related financing mechanisms would involve a wide range of actions including increasing their resources as well as human and technical capacities on forests, as well as improving access to their resources by a larger number of countries and potential beneficiaries by adjusting their financing criteria and simplifying the relevant procedures.

80. Regarding establishing a voluntary global forest fund, it should be recognized that a single global fund on forests may or may not be the answer to the problem that countries are facing. A number of potential advantages and disadvantages can be identified for this option. The modus operandi of a voluntary global forest fund has not yet been established. One possible approach identified during AHEG1 was to use the voluntary global forest fund as a source for funding for national forest funds or similar entities.

81. The response to whether or not to establish a voluntary global forest fund is ultimately a matter of a political decision by governments. Nevertheless, it is important to look for a mixture of measures at all levels and seek for a win-win solution by putting all the options as complementary. In this context, while the international community should strive to strengthen existing forest-related financing mechanisms, it can also consider devoting a fund or funds to address the SFM needs and gaps that are not yet addressed by the existing mechanisms. This solution can bring benefits for all countries and stakeholders.

INTRODUCTION

Background

1. Forests address multiple global challenges and contribute to sustainable development of all countries, even those without significant forested areas. Forests provide a multitude of goods and services that support human wellbeing and reduce poverty, contribute to long-term social and economic development, and reduce environmental risks and ecological scarcities. The livelihoods and subsistence of over 1.6 billion people depend on forest goods and services. Forest timber and non-timber products and services add significant value to the world economy and offer employment in rural areas. The provision of adequate and sustained financing for forests is of utmost importance to ensure a continued supply of the wide array of forest products and services to societies while reducing ecological degradation, including reducing effluents, emissions and waste.

2. Financing forests generates safe, long-term rates of return together with multiple co-benefits for climate, biodiversity, protection of soils, water, flood control and employment for forest communities and indigenous peoples. Thus, it is no surprise that financing for sustainable forest management (SFM) has been a major focus and a center of policy debate among and within countries, in particular since the Rio Conference in 1992.

3. Since then, several studies and reports have highlighted a wide gap between financing needs and the low level of resources available for forests, as well as the need for better coordination and more efficient use of existing resources. The main objective of these efforts was to identify new ways to mobilize resources for sustainable forest management.

4. In recent years, increased attention to the carbon-content potential of forests has led to an unprecedented diversion of financing to activities related to forest-based climate change mitigation. This trend has created huge enthusiasm to look at a broader context of forest financing that unleashes all potentials of forests. Finding a lasting and comprehensive solution for forest financing has been a standing item on the agenda of the United Nations Forum on Forests (UNFF). The adoption of the non-legally binding instrument on all types of forests (the forest instrument) by the General Assembly in 2007 accelerated the efforts.

5. The Collaborative Partnership on Forests (CPF) members formed the Advisory Group on Finance (AGF) to produce the 2008 AGF study. It focused on “financing flows and needs to implement the forest instrument” and provided systematic and objective analysis of the needs, available funding sources and mechanisms for funding, as well as gaps vis-à-vis the forest instrument. This study was presented to the eighth session of UNFF (April 2009).

6. The subsequent discussions among countries led to the adoption of a milestone resolution at the special session of the ninth session of the UNFF on 30 October 2009, through which the Forum established an open-ended intergovernmental ad hoc expert group (AHEG) on forest financing and the Facilitative Process (FP).¹

¹ ECOSOC, “UN Forum on Forests Report of the Forum on the special session of the ninth session” (2009), para. 3.

7. The AHEG was mandated to make proposals on strategies to mobilize resources from all sources to support the implementation of SFM, the achievement of the global objectives on forests (GOFs) and the implementation of the forest instrument, including, *inter alia*, strengthening and improving access to funds and establishing a voluntary global forest fund. The Forum also adopted a number of functions for the FP,² with the primary focus of assisting developing countries with identifying barriers to accessing finance and the means to address those barriers.

8. Based on the report of the first meeting of AHEG, which took place in September 2010 in Nairobi, Kenya, the Forum, at its ninth session in February 2011, invited the CPF/AGF to expand and update its 2008 study for the second meeting of AHEG (AHEG2),³ to be held from 14-18 January 2013 in Vienna, Austria. The tenth session of UNFF will be held in April 2013 in Istanbul, Turkey, and is mandated to make a decision on forest financing based on proposals from AHEG2, as well as the results of the FP work and other relevant inputs.

The 2012 AGF/CPF Study on Forest Financing

9. The Resolution of Forests for People of the ninth session of the Forum clearly set the terms, scope and the main components of the 2012 Study.⁴ This study is the most substantive contribution of the CPF members to the broader ongoing debate on forest financing in general, and to the UNFF forest financing process, in particular addresses the following major requests of the Forum to the CPF member organizations:

- i. Providing analyses of gaps in and opportunities for forest-related financing addressing climate change, biological diversity, sustainable land and forest management, land degradation and desertification, and financial resources associated with FLEG processes, as well as the transfer of environmentally sound technologies and capacity-building;
- ii. Providing proposals on strengthening and improving access to funds and establishing a voluntary global forest fund;
- iii. Examining the implications of new and emerging forest-related financing initiatives related to the Rio Conventions;
- iv. Identifying barriers for access to financing and suggesting ways to simplify relevant procedures and remove such barriers;
- v. Strengthening an enabling environment for increased financing for forests.

10. This study, thus, looks beyond the forest instrument and focuses on the broader terms of forest finance.

² Ibid., paras. 3-4.

³ ECOSOC, "UN Forum on Forests Report on the Ninth Session" (2011) decision 2011/42.

⁴ Ibid., pages 11 and 12, paragraphs 28, 29, 32a, and 34.

11. The preparation of the present study, led by the UNFF Secretariat, took about one year and involved extensive interagency collaboration among CPF members. The AGF agreed on its work plan and the outline of the 2012 study during its first meeting on 9 June 2011 in New York. The CPF later approved the outline of the study and the AGF work plan during its meeting on 26 June 2011 in Orvieto, Italy. In its second meeting on 16 December 2011 in New York, the AGF agreed on the division of work among its members and, in its meeting on 16-17 May 2012, reviewed and finalized the 2012 Study on Forest Financing.

Objectives and the Scope of the 2012 AGF Study

12. The 2012 Study on Forest Financing aims to provide a systematic and objective analysis of funding sources and gaps among and within thematic areas, geographic regions, country groups and individual countries, through a review of existing, emerging and evolving funding sources and mechanisms. The main objective is to see whether the forest financing situation has improved since the last study or remains the same, and if it has not improved, what should be done to improve the situation.

13. The previous AGF study primarily examined the international arrangements for funding forests, while this study delves further by exploring all types and sources of funding, for all types of forests and for trees outside forests, at the national, regional and international levels. The 2012 Study also examines interactions among other sectors and issues that have direct impact on forests and their financing.

14. The 2012 AGF Study on Forest Financing expands and updates the 2008 study in multiple ways, by examining: (1) the variety of actors involved in financing forests, (2) the various types of financing and various levels of actions involved, and (3) the ways in which these factors interact with one another.

15. The AGF agreed that the 2012 Study should contain six chapters. The structure of the various chapters has been designed to update and expand the 2008 AGF study. To this end, chapter 1 is devoted to reviewing the flow of financing to forests from all sources. Attempts have been made to use, as closely as possible, the methodologies and metrics used in the 2008 AGF study for consistently available data such as ODA flows and PRSP analyses. Differences in reporting or analysis will be highlighted in the discussion on each topic.

16. Chapter 2 of this study includes analyses of opportunities for forest-related financing in relation to climate change, biological diversity, sustainable land and forest management, and land degradation and desertification. It also reviews financial resources associated with forest law enforcement and governance processes as well as the transfer of environmentally-sound technologies and capacity building, in response to the request of the UNFF9 Resolution. To avoid the double-counting of resources in Chapters 1 and 2, especially with regard to official development assistance (ODA), explanations have been provided in various places in the two chapters.

17. Using as a baseline the previous study's identification of gaps and needs in financing sources and mechanisms, Chapter 3 of this Study aims to map where there have been changes in

thematic areas, geographic regions or country groups with respect to forest financing, and to identify the gaps and needs.

18. Chapter 4 focuses on identifying barriers to accessing resources for forests. This chapter presents a comprehensive analysis of the main obstacles that countries and other stakeholders face in accessing funds for forests. Based on this analysis, sets of proposals have also been made on how to overcome the barriers.

19. Chapter 5 highlights a number of success stories on forest financing across the globe. To this end, some case studies have been reviewed and the associated lessons-learned are highlighted in this chapter.

20. Based on the findings of the previous chapters, Chapter 6 of the study proposes actions and measures to mobilize financing from all sources and for all types of forests. These include proposals for national and international actions. The Chapter also provides some suggestions on strengthening existing forest-related mechanisms and instruments at the global level, and reviews a number of options for the mobilization of financing for forests. In addition, the chapter contains a review of the advantages and disadvantages of establishing a voluntary global forest fund.

Data and Methodology

21. Given the scope of the 2012 study, which includes all sources of funding for forests at all levels, various sources of information have been examined and multiple methodologies have been employed. The data and information were collected compiled from existing databases outlining global- and regional-level forest financing activities, input from the CPF members, literature reviews on forest financing including various studies and reports on new and emerging forest financing-related initiatives, and inputs from individual consultants and experts.

22. In addition, queries were sent to countries with designated national focal points to the UNFF, on forest-related financing activities at the national and sub-national levels. Finally, this study incorporated the agreed recommendations from the first three FP workshops on forest financing in low forest cover countries (LFCCs) and Small Island Developing States (SIDS), held in Tehran, Iran (November 2011), Niamey, Niger (February 2012) and in Port of Spain, Trinidad and Tobago (April 2012).⁵

23. However, despite the breadth of sources identified and reviewed, information continues to remain limited on the needs of financing for forests among developing countries. To address this gap, and consistent with the previous 2008 study, this study examines Poverty Reduction Strategy Papers (PRSPs) to gauge demand for ODA.

24. One main shift in analyzing finance flows is this study's almost exclusive reliance on figures from the Organisation for Economic Co-Operation and Economic Development (OECD) for forest Official Development Assistance (ODA). Shortly after the 2008 study was published,

⁵ The 2008 study identifies LFCCs and SIDS as two groups of countries that experience inadequate financing for forests. For the reports of these workshops, please refer to: <http://www.un.org/esa/forests/facilitative-process.html>.

the OECD introduced OECD.Stat, a database of ODA figures, which has significantly simplified the task of collecting data and analyzing trends. The shift to primarily utilizing OECD.Stat has shown smaller annual commitments of ODA than the 2008 study for the same years (2005-2007).⁶ In discussions on the results collected from existing global and regional-level sources and databases, two concepts are used: (1) forestry ODA, referring to what has been classified by the OECD as support to the forest sector, and (2) forest ODA, which is a broader concept (i.e. flows to forests in general) not captured in the OECD estimates.

25. Given that this study aims to expand and update the 2008 study, the methodologies and metrics used for consistently available data are as similar as possible. Differences in reporting or analysis are highlighted in the discussion on each topic, such as on ODA flows. A general classification scheme, which has been consistently in use since a 2006 study on funding and finance for forestry and the forest-based sector,⁷ is also presented in Chapter 1. Due to the scope of the 2012 study, however, various methods such as the solicitation of inputs by questionnaires, interviews, reviews of forest financing publications and reports, panel discussions and workshops were applied.

Limitations and Risks

26. The issues encountered in the previous study remain similar in that (1) there remain differences in thematic coverage in reporting countries, (2) there continue to be differences in national and organizational reporting standards to the OECD, including the inclusion by some countries of concessional bilateral credits and loans as ODA, (3) forest components remain adjoined with broader programmes and projects, (4) large gaps remain in the data, and (5) the risk of double-counting ODA flows going through multilateral organizations remains.⁸

27. Limited access to information, particularly in the private sector and at the national level for many countries, remains a challenge. Access to ODA-related data also continues to be difficult, as the reporting guidelines for financing flows to forestry as determined by the OECD are narrower than the scope of this study.

28. As data on domestic financing were not readily available, the study focused largely on the information provided by countries in their responses to a questionnaire, as well as on external sources. Not all countries responded, but the solicited input provided a valid source of information that is presented in various parts of this study.

29. It is important to point out that many forest goods and services, including both timber and non-wood forest products, do not enter formal markets, making it difficult to adequately capture their value. In addition, services provided by forests such as climate change mitigation and carbon sequestration are similarly difficult to value, given that they are not often marketed and therefore are 'invisible' in economic statistics. This has resulted in consistent and serious under-

⁶ For more details, please refer to Table 1.4 of Chapter 1 in this study, as well as Table 3.1 of the 2008 Study.

⁷ Ivan Tomaselli, *Brief Study on Funding and Finance for Forestry and Forest-Based Sector* (2006), p. 4.

⁸ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests* (2008), p. 20.

valuation of forest values in the official statistics.⁹ This poses an additional challenge for comprehensively identifying all sources of financing for forests.

⁹ OECD, *Natural Resources and Pro-Poor Growth: The Economics and Politics* (2008), pp. 30, 96.

CHAPTER 1: FOREST FINANCING FLOWS

Introduction

1. Forests contribute approximately USD 468 billion or 1% of global gross value added to GDP,¹⁰ achieved through an annual investment in the forest sector of USD 64 billion.¹¹ Of this, approximately 28% is spent on forest management and the rest is invested in forest product processing and trade. Forests provide development opportunities at many scales; however, the most common allocation of public and private financial resources is in large-scale commercial timber production in investments in pulp and paper and plantation development. At local and community levels, forests also provide an essential source of cash income. In many countries, non-wood forest products (NWFPs) – fruits, nuts, honey, mushrooms, bushmeat, plant products, medicine, aromatic products and exudates like lacquer – play important roles in local economies and livelihoods, and are important exports.

2. Estimating the investments in forestry is a difficult task due to the scarcity or unavailability of detailed and updated information. Most of the information in this study was collected from governments, bilateral and multilateral organizations and from recent and relevant reports and studies.

3. Some existing international reporting systems do not adequately capture data on domestic financing flows to forests, as the information collected is often grouped with agricultural flows and sometimes even fisheries flows. There is also a high risk of double counting flows to forests when examining national accounts, since many portions of forest-related budgets derive from ODA.

4. Due to its importance, the 2008 study focused mainly on financing the implementation of the non-legally binding instrument on all types of forests (the forest instrument) and achievement of its four global objectives on forests (GOFs).¹² The forest instrument is the first ever comprehensive and action-oriented global strategy towards achieving sustainable forest management. This instrument grew out of the international community's need for a strategic framework that:

- i. Strengthens political commitment and action at all levels to implement sustainable management of all types of forests and achieve the shared global objectives on forests;
- ii. Enhances the contribution of forests to the achievement of internationally agreed development goals, including the Millennium Development Goals (MDGs); and
- iii. Provides a framework for national action and international cooperation.

¹⁰ FAO, *State of the World's Forests 2009*, (2009).

¹¹ Ivan Tomaselli, *Brief study on funding and finance for forestry and forest-based sector* (2006).

¹² See: ECOSOC, "General Assembly Resolution 62/98," (2008).

Box 1.1 Sustainable Forest Management

Sustainable forest management (SFM) as a dynamic and evolving concept aims to maintain the economic, social and environmental value of all types of forests, for the benefit of present and future generations. SFM is characterized by seven thematic elements, including: (i) extent of forest resources; (ii) forest biological diversity; (iii) forest health and vitality; (iv) productive functions of forest resources; (v) protective functions of forest resources; (vi) socio-economic functions; and (vii) legal, policy and institutional framework.

Source: ECOSOC, “General Assembly Resolution 62/98” (2008).

5. The forest instrument contains specific actions, objectives, timelines and anticipated means for all relevant stakeholders at all levels. Therefore it is important to devise necessary tools and mechanisms to deliver the commitments and actions contained in the instrument. Catalyzing the implementation of the forest instrument is the centerpiece of any decision on improving forest financing architecture. The forest instrument provides a set of comprehensive actions to be taken by governments to achieve the GOFs. Many points are related to SFM and financing by varying degrees, touching upon the need for:

- i. Recognizing the value of goods and services provided by forests and trees outside forests;¹³
- ii. Encouraging investment and market participation by all stakeholders;¹⁴
- iii. Cross-sectoral cooperation,¹⁵ rural development and poverty reduction,¹⁶ and reversing the decline in ODA.¹⁷

6. It is difficult to follow the financial flows of many activities related to the above categories. The non-legally binding nature of the forest instrument has resulted in national data on the financing implementation of this instrument not being easily accessible, as there is no mandatory reporting requirement for implementation of this important globally-agreed action plan on forests. In addition, due to the fact that many of the actions contained in the forest instrument are of a cross-sectoral nature, countries often report on the implementation of many of these actions through other national reporting formats such as those for biodiversity, desertification and climate change.

7. In light of the above issues, it is more feasible to examine trends in data on forests that have been collected and reported consistently and systematically, though they are largely external and not domestic sources of financing. These include ODA flows, and to a lesser extent national information. With regard to private sector financing, systematic studies related to

¹³ ECOSOC, “General Assembly Resolution 62/98” (2008), paragraphs 6(d) and 6(j).

¹⁴ Ibid., paragraphs 6(h), 6(i), 6(j), 6(n), 6(x), 6(y), 7(e), 7(f) and 7(g).

¹⁵ Ibid., paragraphs 6(k) and 6(m).

¹⁶ Ibid., paragraphs 6(d) and 6(l).

¹⁷ Ibid., paragraphs 7(b) and 7(c).

finance flows have begun to emerge in recent years particularly those related to carbon markets and other mechanisms related to the value of the services forests provide, though the data are not yet comprehensive.

8. This chapter reviews the flow of financing to forests. This review includes the flow of financing at national and international levels and includes both public and private sources. Investments in forests that are addressed in this study include both soft investments (investments in improving governance, capacity, institutions, and information), as well as hard investments (investments in productive assets such as trees, machinery, etc.). Soft investments were introduced to improve the link between hard investors and donor funding. While soft investments have not taken off on a large scale, such a distinction will assist with the identification of areas of progress and areas that continue to exhibit needs and gaps. Moreover, a distinction is made between “investments” and “revenues.” While this study includes analyses on the profits and taxes from the sale of forest products, which are a common source of forest finance, it also largely refers to investments as another source of forest finance. The main objective of the review of the funding flows to forests is to see whether the flow of financing to forests has changed or remained at the same level.

Box 1.2 References to the Global Objectives on Forests (GOFs)

In December 2007 the General Assembly adopted the non-legally binding instrument on all types of forests (the forest instrument), which includes its four global objectives on forests (GOFs):

Global objective 1

Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation;

Global objective 2

Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people;

Global objective 3

Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests;

Global objective 4

Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management.

Source: ECOSOC “Resolution 2007/40 [non-legally binding instrument on all types of forests]” (2007).

9. The 2008 report of the AGF categorized forest financing sources based on type (public or private) and scale (domestic or international). Public sources include general government revenue, revenue from state-owned forests, and bilateral as well as multilateral funding. Private

sources include communities, non-governmental organizations (NGOs) and the forest industry, and may operate at national or international scales. This categorization will be used throughout this study (see Table 1.1), although the available information and data vary from one category to another, and different sources can be used in combination with one another.

Table 1.1 Forest Financing Sources by Type and Scale

	National	International
Public	<ul style="list-style-type: none"> • General government revenue • Revenue from state-owned forests • Forest sector fiscal revenue 	<ul style="list-style-type: none"> • Bilateral aid agencies • Multilateral/intergovernmental financing institutions
Private	<ul style="list-style-type: none"> • Forest owners • Communities • Forest industry • Institutional and individual investors • Philanthropic funds and donors • NGOs 	<ul style="list-style-type: none"> • Institutional and individual investors • Forest industry • Philanthropic funds and donors • NGOs

Adapted from: Markku Simula, Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests (2008).

1.1 National Public Forest Financing

10. It is still commonly accepted today as in 2008, that aside from ODA, forest financing is heavily reliant on internal cash flows and therefore is a predominantly domestic phenomenon in many countries, since lending and equity capital are difficult to access.¹⁸ As was the case in 2008, the available information on national flows for forest financing continues to be more limited than that of external sources. Domestic sources of funding, which include national public sources, bank loans and other private sources, are similarly difficult to track due to differences in reporting and analyses as well as varying national priorities placed on domestic forest resources. National forest programmes offer one step in streamlining forest management and priorities, but at this point few analyses exist on aggregate national trends in forest financing.

11. Sources of forest financing that fall within the public national category include flows from general government revenue as well as revenue from state-owned forests. The status and type and level of funding to forests varies among countries, as do funding structures and supported activities.

12. National public financing is the major source for forestry activities in many countries, and generally comes from government budgetary allocations to official forestry institutions/bodies as well as revenues generated from state-owned forests. Unfortunately most countries are unable to raise adequate domestic public funds for the forest sector. In some regions like Africa this is partly due to low levels of economic growth and lower prioritization of

¹⁸ See: UNEP FI, *REDDy Set Grow Part I: A briefing for financial institutions* (May 2011), p. 11. Also see: Ivan Tomaselli, *Brief Study on Funding and Finance for Forestry and Forest-Based Sector* (2006), p. 11.

the forest sector in national policy, resulting in smaller budget allocations. In some countries with extensive commercially valuable forests, these resources have been treated as quick sources of revenue but with minimal re-investment into their management.

13. The public-sector contribution (as investor, regulator and facilitator) plays an important role because it is often the only source of funding for forestry activities focused on social and environmental benefits. With close to 80% of world's forests publicly owned, funds garnered through political means can also provide an important leveraging function that can boost private sector investments.

14. State income from harvesting or other uses of forest resources comes from the items on the following list; however, those incomes generated do not necessarily return directly to forest management and conservation efforts, as discussed later in this chapter:¹⁹

- i. Fees and taxes collected for: (1) the allocation of land, forests and contracts to harvest timber and plant and animal wildlife, or on the circulation of such harvested wood, and (2) payments for licenses and stamp duty for the transporting, processing and marketing of wood, as well as stampage from state-owned forests;
- ii. Taxes and charges (value added tax (VAT), export duties, social charges, etc.);
- iii. Imposition of fines, confiscation and damages for infringements of the law;
- iv. Sale of plants and plant material from nurseries and other forest products;
- v. Issuing of tour operators' licenses to harvest and market plant and animal wildlife;
- vi. Entrance fees paid by visitors to protected natural areas.

15. Roundwood production has increased slightly in places like Africa, and increasing investments in countries such as Mozambique, Tanzania and Uganda suggest that this activity will grow in the next two decades. Similarly, sawnwood continues to play a large role in domestic revenue generation,²⁰ which indicates an expected increase in state revenues from the aforementioned forest activities in Africa, which has experienced among the lowest levels of wood harvesting in comparison with other regions.

16. Non-wood forest products (gums and resins, honey and beeswax, dyeing and tanning materials, bamboo and rattan, bushmeat, fodder and a considerable number of medicinal plants) are largely used for subsistence and traded informally in all tropical regions. Thus, their livelihood contribution and local significance exceed that which may be apparent from official statistics.²¹ With increased opportunities for local, regional and international trade, the NWFP sector in this region is undergoing perceptible changes. African governments are increasingly developing policies and legislation aimed at formalizing NWFP value chains,²² while countries like Brazil have long had traditions of supporting NWFP markets. Of particular significance is

¹⁹ Kees van Dijk and Herman Savenije, "Towards National Financing Strategies for Sustainable Forest Management in Latin America" (FAO, 2009).

²⁰ Peter Gondo, "A Review of Forest Financing in Africa," p. 14.

²¹ Shackleton et al., "Direct-use Values of Non-timber Forest Products from two areas on the Transkei Wild Coast" (2007).

²² FAO, State of the World's Forests (2011), p. 95.

the emergence of markets for ‘ethnic foods,’ medicinal plants and natural or organic goods, such as honey, beeswax and shea butter, which in the case of Brazil, has been supported by a growing middle class that places increased value on products deemed more ‘natural’ or ‘organic.’ Nonetheless, several products that are traded nationally and internationally straddle the informal and formal sectors. For example, collection of wild honey may remain in the informal sector, while processing and trade are in the formal sector.²³

17. When the fiscal revenue from the forest sector is collected, it can go directly to the central government treasury. Forestry departments then access these funds through annual budgetary allocations. The actual allocation to forestry, and the proportion of forestry funding in relation to the national budget, varies from country to country depending on national priorities.²⁴

18. For example, the General Directorate of Forestry in Turkey is responsible for the management of almost 99% of all forests in the country.²⁵ Some 16% of the annual budget derives from usufructs and rents of forested land, with another 6% derived from the sale of NWFPs. A small portion of its budget (7%) derives from the revolving budget, the majority of which is funded by the sale of timber products. For a breakdown of budget sources by percentage, please see Table 1.2 below.

Table 1.2 Budget Sources for General Directorate of Forestry, Turkey

Source	%
Treasury Aid	71.08
Usufructs and Rents of Forested Lands	15.64
Sale of NWFPs and Repayments of Granted Credits	6.20
Revolving Budget	7.08

Source: Mr. Tamer Otrakçier, UNFF National Focal Point for Turkey
– UNFF10 preparations, 6 February 2012.

19. In many countries forestry activities also receive funds through ministries that host a range of other portfolios including agriculture, rural development, wildlife, fisheries, tourism, water, nature conservation and monuments (depending on the country). Given the sheer diversity of sectors within these ministries, this can downplay the importance of the forest sector and sometimes result in less funding for forests than needed. Low allocations may also be partly due to the prioritization of funds in relation to other needs such as health, social welfare and food.²⁶

²³ This has serious implications related to gender in the collection, production and distribution of NWFPs, as discussed in Chapter 5 in the case study on Burkina Faso.

²⁴ Peter Gondo, “Financing Sustainable Forest Management in Africa,” (2010).

²⁵ Mr. Tamer Otrakçier, UNFF Focal Point for Turkey, UNFF10 preparations 6 February 2012.

²⁶ Akroyd and Smith, “The decline in public spending to agriculture – does it matter?” (2007).

20. To address the challenges in revenue collection and improve financial resource mobilization in the sector, most governments in Africa have instituted a number of reforms. The first type of reform that has been tried by some countries is the conversion of public forest institutions into semi-autonomous commercial enterprises that are empowered to retain all the revenue they generate. This has been successfully implemented in Sudan, Uganda and Zimbabwe where the Forestry Commission and the National Forestry Authority retain all the income they generate including income from their commercial activities. In Ethiopia, the Oromiya Forest and Wildlife Enterprise retains all its income and funds all its own operations. The Forest National Corporation of Sudan also operates along the same lines. Reforms are sometimes tracked, such as the case in Mozambique discussed in Box 1.3.

21. However, despite elaborate regulatory and institutional provisions, some countries experience significant revenue leakages resulting from weak capacity to manage revenue collection, as well as limited knowledge of both the personnel assigned to collect revenue and the value of the forest resources. Huge losses can result along the forest value chains, especially in the timber industry, due to low processing efficiency. For example, harvesting processes can result in losses of 10% to 30% while sawmills can experience losses of 20% to 43%.²⁷ Similarly, royalties can be undervalued and therefore under collected resulting in losses of up to 75%.

22. Another approach used in some countries in Africa is the establishment of national forest funds (NFFs), which are often designed and operated by countries (Table 1.3). NFFs were established to enable public forest institutions to retain and manage funds to effectively support conservation, protection and the sustainable utilization of forests. In their most basic form, NFFs are designed to set aside a portion of national revenues for forestry purposes. They exist for more than a single government budget cycle, segregating specific forestry-related revenues and earmarking them for investment in the forest sector.²⁸ In some cases these have been developed as part of the national forest programmes (nfp) while in others they have been developed as windows under national environment funds.

23. For example, in July 2011 Tanzania established a forest fund as part of the national forest financing strategy, which also provides for the establishment of the Tanzania Forest Service. In Mozambique, the Forest Law provides for the establishment of a National Forest and Wildlife Development Fund. However, this fund is not yet fully operational and most of the revenues from levies and concession fees are remitted to the Agriculture Fund, which then retains a percentage. Mali established two forest funds in 2004, namely the Forest Development and Protection Fund and the Fund for the Protection of Fauna. The forest fund was allocated USD 0.8 million in 2009 and was earmarked to receive USD 1.2 million in 2010. These funds help to ensure that revenues generated through utilization of forests and fauna respectively are ploughed back into forest and fauna management. Similar approaches have been developed and adopted in other West African countries such as Benin, Burkina Faso and Niger.

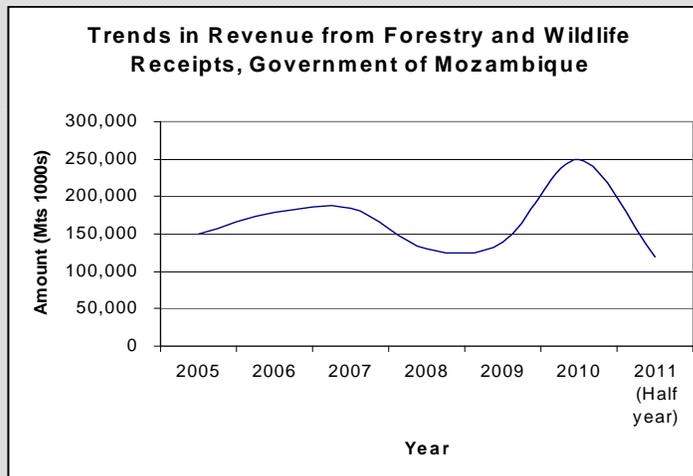
²⁷ Clarke and Nokkala, "Non-tax Revenue from Forests in Tanzania," (2007).

²⁸ FRA, *Global Forest Resources Assessment 2000*, FAO (2001).

Box 1.3 Revenue Generation in Mozambique

The mechanisms for generating revenue through user fees appear to be generally standard across the region with minor variations across countries due to varying contexts. For example, the government of Mozambique has introduced an afforestation levy based on a percentage of the volume of timber harvested and sold.

Concession fees are an important source of revenue in countries that harvest natural timber and grant hunting and conservation concessions. However, in some countries the revenue collection potential from concessions has not been fully realized due to a number of challenges including monitoring. In Mozambique, there are an estimated 64 small to medium scale companies that have been allocated 150 timber concessions in indigenous forest areas but have not paid the concession fees for various reasons including attempts to have the fees reduced or scrapped. The government has however been able to collect fees from the single license fee holders who operate on annual permits. It is estimated that the government only realizes 10% of the total value of fees from indigenous forest concessions. A study of forest sector receipts from the Department and Natural Resources and Tourism, Government of Mozambique below indicates a gradual decline in receipts over the past 5 years to 2009 and a sudden increase, which is attributed to improvement in collection as a result of payments for license fees for establishment of plantations and improvement in wildlife utilization receipts.



Source: Planning Unit, Department of Natural Resources and Tourism, Government of Mozambique

Table 1.3 Examples of Different Forms of Forest Funds in Africa

Country	Description of fund
Burkina Faso	National and local forest management funds receive revenues from taxes and sales of forest products
Cameroon	The Forest Development fund receives money from government budget allocations and revenues from the sale of forest products
Congo	The natural resources management fund receives income from multiple sources to support forestry development, wildlife and fisheries
Gambia	The National Forest Fund receives income from multiple sources for the protection, development and sustainable use of forests, as well as the promotion of community forestry
Ghana	Plantation development fund
Guinea	The Forest Fund receives revenue from multiple sources for supporting forest management and development activities
Lesotho	The National Forest Fund receives all forest fees and taxes to support research, as well as private and community forestry
Malawi	The forest development and management fund receives income from the government and other sources to support forest development with an emphasis on community forestry
Mali	The Fund for the Development of Forests and Fauna finances forest development and investments in nurseries and reforestation
Mozambique	The Forest and Wildlife Development Fund receives money from royalties, taxes and concession fees, and also has community funds
Senegal	The National Forest Fund receives income from the sales of forest products and other sources. It is used to fund state, private and community forestry
Tanzania	The National Forest Fund receives income from various sources to support forest development including education, research and community forestry
Zambia	The National Forest Fund receives incomes from royalties and concession fees to support forestry development, research and community forestry

Source: Peter Gondo, “A Review of Forest Financing in Africa” (2012).

24. In Asia, some countries such as Indonesia report constraints in national budgetary spending due to low funding priorities coupled with limited resources.²⁹ However, situations in countries such as Papua New Guinea are characterized by interdependent funding sources for

²⁹ Presentation by Mr. Yetti Rusli, representative of the Government of Indonesia, at UNFF AHEG1, Nairobi, Kenya, September 2010.

forest activities, due in large part to significant revenues from taxes and levies generated through the forest sector (Box 1.4).

Box 1.4 Domestic Financing in Papua New Guinea

The forestry sector in Papua New Guinea earns significant revenues, and thus is a major contributor to the socio-economic development of the country. About USD 200 million (with log export levies comprising USD 80-100 million annually) is generated annually, with most of the revenues directed towards social sectors such as education, law and order, health, sports and infrastructure development. The budget appropriated by the government to the Forests Authority itself is very minimal (approximately USD 12 million annually).

Timber companies operating in the country are required to pay a forest management fee of about USD 0.4 per cubic metre. This money is paid to the Forests Authority for meeting the cost of sustainable forest management. While a number of concessions have been allocated to timber companies, the companies employ selective logging methodologies and pay royalties and premiums to land owners in addition to export and corporate taxes.

International and local NGOs are increasingly carrying out forest management and conservation programs with the view of educating forest dependent people, who are also the landowners, about the important role of forest management.

Mr. Dambis Kaip, UNFF National Focal Point for Papua New Guinea, 14 February 2012.

25. Domestic spending from the public sector in China comprises approximately 2% of the total central fiscal expenditure annually, an amount of RMB 84 billion in 2009. These figures include bilateral and multilateral loans, grants-in-aid and private sector investments (both domestic and international). In 2009, loans and grants-in-aid accounted for 25% of foreign funding, whereas enterprise investments accounted for 75% of foreign funding to forests. Between 1998 and 2009, total financing to forests increased by an order of magnitude, from RMB 13.5 billion to RMB 138 billion.³⁰

26. In Norway, support schemes for forestry prioritize regions that do not have traditions of commercial forestry, primarily in the west and north. A regulation under the Forestry Act requires forest owners to reinvest a portion of revenues from forestry into a government administrated fund called the Forest Trust Fund, which was established to secure long-term investment in sustainable forest management. A forest owner is required to deposit between 4% and 40% of the gross revenue from the sale of timber and firewood to the trust fund that remains

³⁰ Presentation by Dai Guangcui, representative of the Government of China, at UNFF AHG1, Nairobi, Kenya, September 2010.

with the forest holding. The forest owner is incentivized to use the trust fund actively, as only a portion of the money invested in the property will be subject to taxes.³¹

27. In Germany it is common practice that forest owners can receive funding for a number of politically supported activities (such as environmentally sound practices, afforestation and tending, improvement of forest stands, natural regeneration, establishment of cooperatives and forest development) through payment schemes that are partly funded by EU programmes on rural development. The incentive usually ends "at the plant gate," meaning that there are no subsidies for industry.³²

28. The National Forest Programme Facility (NFPPF) summary report for Uzbekistan outlines domestic forest financing sources quite clearly: (1) budget financing, which is primarily comprised of activities under the forestry department; and (2) non-budget financing, which involves commerce, such as the trade of wood products and non-wood products, as well as hunting activities.³³

29. New Zealand's forest administration is divided between planted forest-based commercial forestry largely managed by the private sector, and government-controlled natural forests, which are largely reserved from timber production and managed for conservation and recreation purposes. Funds derive from both domestic and foreign private sector sources within the industry (the foreign-owned New Zealand-based forestry companies), as well as from other sources such as international pension funds and investors in carbon forestry. New Zealand's financing mechanisms generally reflect a broad range of SFM forest objectives for all types of forests, with the division between commercial planted forest and natural forests somewhat blurred by a broadening multi-use role applied to planted forests. However, private investments tend to remain focused on traditional timber-related forestry.³⁴

30. Payments for ecosystem Services (PES), or other similar schemes, can finance forest management in many countries. For instance, Croatia adopted funding and taxation structures that have been successful at times in charging all taxpayers a 'green tax' of 0.0525% of total earnings.³⁵ Functioning similarly to PES, the tax is rooted in Croatia's Forest Law, which outlines the public benefits of the functions of forests. The revenues are used to fund sustainable forest management activities and are distributed according to forest ownership (22% goes into funds for privately owned forests, 78% for state-owned forests).

31. In the aforementioned examples, it is clear that funding for sustainable forest management domestically is based on structures resembling PES. This is also true in the case of Finland, whose legal framework for financing forests is supported by the National Forest Programme. The Forestry Department has been able to separate its domestic financing inputs to tease out private versus public flows, as well as financing for different categories, with annual

³¹ Arne Ivar Sletnes, UNFF National Focal Point for Norway, 8 March 2012.

³² Matthias Schwoerer, UNFF National Focal Point for Germany, 8 March 2012.

³³ Alisher Shukurov, UNFF National Focal Point for Uzbekistan, 27 January 2012.

³⁴ Alan Reid, UNFF National Focal Point for New Zealand, 22 February 2012.

³⁵ Ms. Ivana Pesut, UNFF National Focal Point for The Republic of Croatia, 3 February 2012.

estimates at EUR 643.1 million per year. A large portion of this amount comes from the forest owners themselves – individuals and/or families who own 60% of all forests in the country.

1.1.1 National Characteristics Influencing National Forest Financing

32. As briefly demonstrated, the domestic architectures that fund forests vary from country to country. This can be based on characteristics such as ownership patterns, extent of forest cover, primary functions of forests, type of forests, economic status and more. Some of the characteristics are discussed in detail below.

A. Forest Ownership Structures

33. Forestlands can be owned by the state, communities, individuals, NGOs, non-profit groups, or the for-profit private sector. Referring to the latest available data from 2005, 25% of countries reported 100% ownership of forests by the state.³⁶ In more than half (56%) of countries, the government owns more than 50% of forests. In contrast, less than 1% of countries report 100% private ownership of forests, and 19% of countries report more than 50% of their forests as owned privately.

34. These figures are intended to provide a brief picture of the variety of forest ownership arrangements globally. Those countries with greater state ownership of forests have different domestic architectures for forest financing than those countries with greater private ownership structures. In the United States, for example, forest-related financing is very diverse because of the mixed ownership of forests, with 37% in public ownership and 63% in private ownership (Box 1.5).

35. Similarly, 60% of Japan's forests are privately owned, with 90% of this group owning less than 10 hectares each. These smallholders face a number of challenges, including continuously declining profitability in income-generating activities, in particular the declining price of timber.³⁷

36. Countries in Africa and Asia tend toward public ownership of forestlands, whereas countries in Europe and North and South America exhibit less of a tendency (though on average, a majority of forestlands are still owned by the state). Oceania, as well as many countries in the Caribbean, tends toward private ownership patterns of forestlands.³⁸

³⁶ Adapted from: FRA, Forest Resources Assessment 2010 database, <http://www.fao.org/forestry/fra/fra2010/en/>.

³⁷ Presentation by representative of the Government of Japan at UNFF AHEG1, Nairobi, Kenya, September 2010, <http://www.un.org/esa/forests/adhoc-forestfinance.html>.

³⁸ Adapted from: FRA, Forest Resources Assessment 2010 database, <http://www.fao.org/forestry/fra/fra2010/en/>.

Box 1.5 Forest Funding Structures in the United States

The landscape of forest-related financing in this context is highly diverse due to the mix of forest ownership in the United States, which is comprised of 37% of forestlands in public ownership and 63% in private ownership. Separating forest-related financing into three categories (national, state and private) allows for a broader picture of overall spending trends.

National funding is directed to activities such as: the management of 89 million hectares of public lands in the National Forest System; research and development; state and private forestry; capital improvement and maintenance of facilities, roads and trails; land acquisition; wild land fire management and forest legacy.

In addition to the above national activities, state forestry agencies receive funding from their state governments for forest management on state lands, protecting those lands from insects, fire and disease as well as for providing technical assistance to private landowners.

In tandem with the recession, changes in private land ownership and forest industry investments have been significant during the past decade. Most notably, timber investment and management organizations (TIMOS) and real estate investment trusts (REITS) have purchased forest land from both industrial and non-industrial private landowners for investment purposes by pension funds and other institutional investors seeking conservative investments.

Source: Ms. Catherine Karr-Colque, UNFF National Focal Point for the United States, 15 February 2012.

37. In general, where governments own forests and thus are required to provide related finance, revenue is not sufficient due to low allocations to state forest agencies, as briefly discussed in subsection 1.1. Where forests are owned by the private sector, public support is needed for investments in activities that would not otherwise be financed by the private owners/investors due to low profitability or distant cash flows. Smallholders have unique problems in this regard due to the size of their properties, combined with characteristics inherent to smallholders, such as more limited networks and knowledge of the various regulations and opportunities. Furthermore, sustained revenue flows can rarely be materialized in the near term due to their small size.

B. Extent and Quality of Forest Cover

38. In addition to the forest ownership structures that can influence forest financing (and its tracking), the quality and extent of forest cover also impact the flow of financing, including external financing. Forest cover, as defined, is the fraction of total forested area per total land area within a country. Although the following classifications are not frequently used, the FAO has defined these standard guidelines:

- i. Low forest cover countries (LFCCs) are those with forest area covering less than 10% of the total land area;
- ii. Medium forest cover countries are characterized by forest cover between 10% and 40% of the total area; and
- iii. High forest cover countries have more than 40% of total land area covered by forest.

39. Based on data from 2010, the greatest number of countries (42%) falls under the medium forest cover group. High forest cover countries are the second largest group (35%), and low forest cover countries comprise 22% of all countries.³⁹ A number of implications for forest quality stem from the level of forest cover. For example, despite many exceptions, forest landscapes of high forest cover countries tend toward a less fragmented forest cover pattern, resulting oftentimes in more productive forests as measured by biodiversity, ecosystem services, carbon sequestration and so forth. In particular, those high forest cover countries with high deforestation rates have greater potential to tap into funding opportunities for REDD+, PES, Afforestation/Reforestation (A/R) and more.⁴⁰

40. This stands in contrast to LFCCs, which often face desertification as a significant issue as well as forest degradation from wood-based energy production, which is frequently a significant driver of deforestation, forest degradation and desertification.⁴¹ In addition, LFCCs benefit less from climate change-related financing for forests and trees.⁴²

41. Identifying and following finance flows in LFCCs can be extremely difficult as there are often no clearly defined structures for financing mechanisms, even in those countries with operational national forest departments.⁴³ This is partly due to the small coverage of forests in those countries that include relatively small-scale reforestation efforts, such as around urban areas. This issue also stems from relatively low levels of national interest in forests in budgetary processes. In light of these circumstances, some countries have identified a need for more external support to forest industries, such as timber production and NWFPs (fruit, date palms and olives), to catalyze and broaden the scope of domestic forestry activities.⁴⁴

42. The first two workshops in Tehran, Iran and Niamey, Niger, identified a number of gaps in financing forests and trees outside of forests in LFCCs including the following. More information on the needs and gaps of these groups of countries are reflected in Chapter 2 of the present study.

- i. Difficulties in financing carbon stocks in LFCCs due to complicated processes and low levels of national capacities to develop projects;
- ii. Difficulties in garnering high-level political support for forest conservation activities; and

³⁹ Adapted from: FRA, Forest Resources Assessment 2010 database, <http://www.fao.org/forestry/fra/fra2010/en/>.

⁴⁰ Markku Simula, Financing flows and needs to implement the non-legally binding instrument on all types of forests (2008).

⁴¹ Indufor, Background to forest financing in LFCCs (2010).

⁴² Ibid.

⁴³ Mr. Alladeen Al-Sharjabi, UNFF National Focal Point for Yemen, 26 January 2012.

⁴⁴ Mr. Jafar Al-Bayati, UNFF National Focal Point for Iraq, 13 February 2012.

- iii. Limited recognition of NWFPs and other forest-related income-generating activities complementary to SFM.

43. In general, forested areas in LFCCs are often degraded and their rehabilitation requires significant investment. Due to low profitability and difficulties in monitoring progress related to fragmentation of forest stands, there is little justification for the private sector and other investors to invest. Therefore public investment and financing are necessary to confront land degradation and deforestation, but there is to date little cohesion among LFCCs to aid with accessing funds at the international level.

44. In SIDS, however, land use pressure is high due to the small size of the countries. During the 3rd Facilitative Process (FP) workshop for SIDS and LFCCs, held in Port of Spain, Trinidad and Tobago in April 2012, a number of gaps, obstacles and opportunities for forest financing in SIDS were identified.⁴⁵ It was recognized that there is little knowledge of the full economic value of forests including externalities and the contribution of forests to other sectors. A lack of forest and forest-related policies, policy implementation plans and legislation are inherent in many SIDS where forests do not appear on the political agenda. Also characteristic is the absence of forests regional agendas, which also contributes to the low level of attention to forests. More information on the gaps and needs in forest financing in SIDS is provided in Chapter 2.

C. Designated Functions of Forests

45. Forest stakeholders at all levels have long recognized the multiple uses of forests and the various goods and services derived from them. The FAO's Forest Resources Assessment (FRA) database identified five primary designated functions of forests: production, soil and water protection, biodiversity conservation, social services and a last category termed 'multiple uses.' As of 2010 the primary designated functions of forests tended toward production activities, with the notable exception of the Caribbean, whose primary forest functions were soil and water protection (see Appendix A). Biodiversity conservation was a significant function in all regions, particularly in Central America. The importance of soil and water protection varied among regions. Notably, social services did not report strongly as primary designated functions.

46. Appendix A indicates that countries in the Caribbean and Asia (where the average is driven by Eastern, Western and Central Asia) tend to place emphasis on the protective value of forests for soil and water, because 38% and 26% of forestlands, respectively, are designated for the primary purpose of soil and water conservation. This emphasis exists because soil and water resources in these regions are often degraded, and forests are used to manage these resources as well as for watersheds. Biodiversity conservation is given less emphasis, as it is mainly intended to ensure effective protection and extensive management. Social services could also be financed from the revenue that is generated.⁴⁶

⁴⁵ The second Facilitative Process workshop on forest financing in SIDS will be held in July 2012 in Fiji.

⁴⁶ For a discussion of priorities as related to poverty reduction strategy papers (PRSPs), please refer to sub-section 1.2.3.

47. Japan's Cabinet Office has polled its citizens to gauge public expectations of forest functions. From 1980 to 2004, the number one ranking priority for forests in the public opinion polls was in the prevention of landslides.⁴⁷ Since then, this top ranking has only been surpassed by the growing public demand for forests to act as carbon stocks, i.e. CO₂ absorption. Other issues of public concern are water management, air pollution mitigation, recreation, biodiversity, education, wood products and NWFPs. From this, it is possible to see that when a case is made successfully for large-scale forest-related activities such as biodiversity conservation and water management, there is motivation for countries to finance and manage their forests.

1.2 International Forest Financing (ODA)⁴⁸

48. The 2008 AGF/CPF study examined the volume and trends in ODA to forests and forestry, noting in particular the difference between *forestry ODA* and *forest ODA*. Whereas the former refers specifically to the OECD classification of ODA to the forestry sector, the latter is inclusive of forestry ODA as well as other financing activities related to forests. However, there are many different kinds of forest-related activities that take place under ODA-funded programmes that can also fall within different categories of financing related to forests.

49. Official Development Assistance has been a major source of financing for many countries in eastern and southern Africa over the last 30 years. ODA flows to Africa between 1980 and 2007 have largely been provided through bilateral channels (68% on average) that encompass a wide range of development actors and partners including governments, international and national nongovernmental organizations, private contractors and civil society. Since 2000, two thirds of the cumulative forestry ODA has been allocated to Asia, only 20% to Africa and 11% to Latin America.

50. Official Development Assistance typically supports capacity building, technology improvement, infrastructure development, environmental conservation and the removal of structural barriers, as well as the provision of technical assistance and other resources to catalyze development. For example, the Slovak Republic has, as a donor country, designed programming to develop forest reproductive materials, and also has promoted capacity building for SFM.⁴⁹ ODA flows are generally in the form of debt, grant or technical assistance and have two main channels: bilateral, from the donor agency to the recipient, and multilateral, which refers to those funds coming through international agencies that raise their resources from their stakeholders, including their member states and/or donor agencies and international financial markets.⁵⁰

51. As a general word of caution outlined previously in the 2008 study, there is the inherent risk of double counting some portion of ODA flows, in particular those flows that go to multi-

⁴⁷ Presentation by representative of the Government of Japan at UNFF AHEG1, Nairobi, Kenya, September 2010.

⁴⁸ All figures in this subsection relating to ODA were adapted from OECD.Stat. Both bilateral and multilateral flows in later years include funding related to REDD+ readiness activities, including pilot projects, consultations, and workshops.

⁴⁹ Mr. Boris Greguska, UNFF National Focal Point of the Slovak Republic, 22 February 2012.

⁵⁰ Multilateral agencies are usually financed by their shareholders or by member states. In the World Bank's case, however, funding comes only from governments and not from donor agencies.

donor trust funds in multilateral organizations from bilateral donors.⁵¹ For example, in 2010 some such funds were channeled through multilateral organizations such as UNDP and the World Bank. In spite of this, it is possible to reliably analyze trends in international public contributions to forests using the same metrics used in the 2008 study, in some cases expanding upon them.

1.2.1 Overall Trends in ODA Disbursements for Forests (2002-2010)

52. Bilateral ODA is strongly influenced by suppliers' policies, whereas multilateral ODA tends to be more demand-driven.⁵² A brief glance at averaged ODA disbursements indicates an overall 70% increase in disbursements between the period 2005-2007 and the period 2008-2010, and an overall 125% increase between 2002-2004 and 2008-2010. (See Appendices B and C for the complete tables on commitments and disbursements.)

53. Table 1.4 below depicts overall funding to forests as reported by the OECD, the World Bank, ITTO and the GEF. On average, multilateral commitments are slightly smaller in volume than bilateral commitments. Multilateral disbursements, however, consistently comprise a much more significant portion (an average of approximately 80%) of bilateral disbursements.

Table 1.4 ODA Commitments and Disbursements

Source	2002-2004	2005-2007	2008-2010	% Change	% Change
	USD millions at 2010 rates			2002-2004 to 2008-2010	2005-2007 to 2008-2010
ODA Commitments					
- Bilateral	435.62	576.76	690.24	+58.45	+19.68
- Multilateral	248.90	281.98	508.84	+104.43	+80.45
Total	684.52	858.74	1199.08	+75.17	+39.63
ODA Disbursements					
- Bilateral	324.39	397.06	704.84	+117.27	+77.50
- Multilateral	233.89	337.01	555.92	+137.69	+64.96
Total	558.28	734.07	1260.73	+125.82	+71.75

Adapted from: OECD.Stat, ITTO, the GEF and the World Bank.

54. This significant increase in both bilateral and multilateral commitments and disbursements is due in large part to REDD+ readiness activities, as well as its pilot programmes including fast-start funding. Of the 723 forest project commitments identified by the OECD in 2010, REDD+ projects accounted for 8.5% of the total (62 projects). However, funding for REDD+ *related* activities accounted for 40.6% of the total funds to forests (USD 416.34 million of a total USD 1.2 billion). Norway leads all other donor countries in funding REDD+ readiness

⁵¹ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests* (2008), p.20.

⁵² *Ibid*, p. 25.

activities, with 43 project commitments and a total of USD 355.61 million.⁵³ This confirms that the fourth GOF, to the extent it deals with ODA, has been achieved.

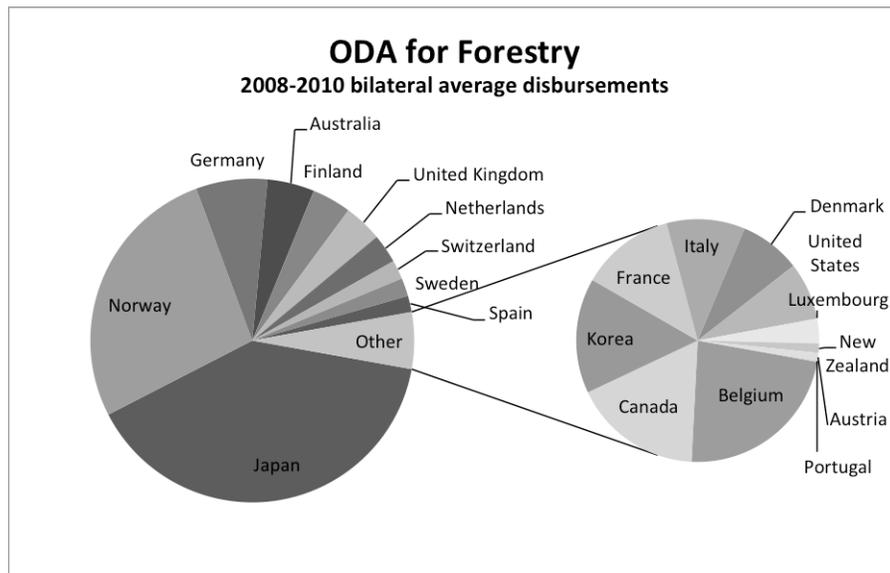
55. It should be noted that forest components can be piggybacked onto broader programmes and projects, rendering them not easily separable for accounting purposes. Following financial flows among bilateral donor agencies, multilateral institutions and recipients can become a complex exercise due to this funding architecture, and would require a thorough investigation of individual projects for the most accuracy, although, it would be a challenge to conduct such investigation at a global scale.

1.2.2 Analyzing Forest ODA

A. Sources of ODA

56. Using the 2008 approach and methodology as a baseline, this study also examines the volume and trends in ODA to forestry. The primary difference between this study and the previous one is that this study has almost exclusive reliance on data provided by the OECD. It is acknowledged that ODA reporting under the OECD provides only a partial view of funding directed towards forests, due to more stringent guidelines in reporting including the tracking of flows to “forestry” rather than “forests” in general. However, despite the reflection of smaller annual flows of ODA compared to the 2008 study, the OECD data are highly useful and informative, as the data allow for the kind of analysis discussed below, due to the regularity and consistency of data collection over time.

Figure 1.1 ODA Disbursements to Forestry, 2008-2010



Source: OECD.Stat, accessed 16 May 2012.

⁵³ OECD.Stat, accessed 23 April 2012.

57. As Figure 1.1 indicates, the OECD reports Japan and Norway as the largest disburbers of finance flows to forests, together comprising more than half of all average disbursements.⁵⁴ In terms of multilateral flows, the World Bank, the European Investment Bank (EIB) and the Global Environment Facility (GEF) were the most significant disburbers, particularly during the financial crisis in 2008 when average annual flows remained just under USD 200 million per agency (see Appendix C).

Box 1.6 Forest Lending at the World Bank

The World Bank Group is the largest multilateral source of finance for forests globally. Since 2002 and the adoption of its forests strategy, *Sustaining Forests*, the Bank has committed approximately USD 2.8 billion in concessional and near-market finance¹ for activities in support of forest sector development. In addition to these activities, substantial private sector financing for the forests sector is provided through the International Finance Corporation (roughly equal to the amount committed through IDA and IBRD), and the Multilateral Investment Guarantee Agency has brokered investment guarantees for forest investments.

Most Bank support for forests and trees is mainstreamed into a diverse range of investments, which range from conventional programs in support of, for example, institutional development, forest management planning and silviculture, to fully integrated watershed management and rehabilitation schemes. The Bank has also provided extensive support to forest conservation, both through its regular lending operations and through grants sourced from the GEF.

The currently active forests portfolio is comprised of 52 operations accounting for USD 835 million in commitments, which are implemented through 7 regional operations and 45 country operations. Currently, the Bank generates around USD 300 to USD 400 million in new business per year. Its total portfolio turns over in 4 to 5 years. The bulk of the portfolio is for operations in the East Asia/Pacific region, and in the Latin America and Caribbean Regions. These two regions account for 74% of the current portfolio.

There has also been a reliance on fast-disbursing policy lending operations in support of forest policy measures (for example, related to forest law enforcement and governance). These were a strong feature of the portfolio between FY 2008 and FY 2011, partly in response to the financial crisis.

New lending in the Bank's portfolio fluctuates widely from year to year, from a low of USD 53 million in FY 2004, and peaking in FY2009 with new commitments totaling USD 510 million that year. Volatility is a function of large shifts in demand, from year to year, and can be influenced by a single large operation.

Various other funding sources are increasingly complementing conventional Bank lending instruments. Multi-donor trust funded commitments to the forests sector (such as the Forest Carbon Partnership Facility, FCPF and the Program on Forests, and PROFOR), for which the Bank is the main implementing agency, currently total around USD 1 billion. These sources will be mostly committed over the next 8 years, and create significant leverage for the Bank by blending grant resources with its regular funding streams.

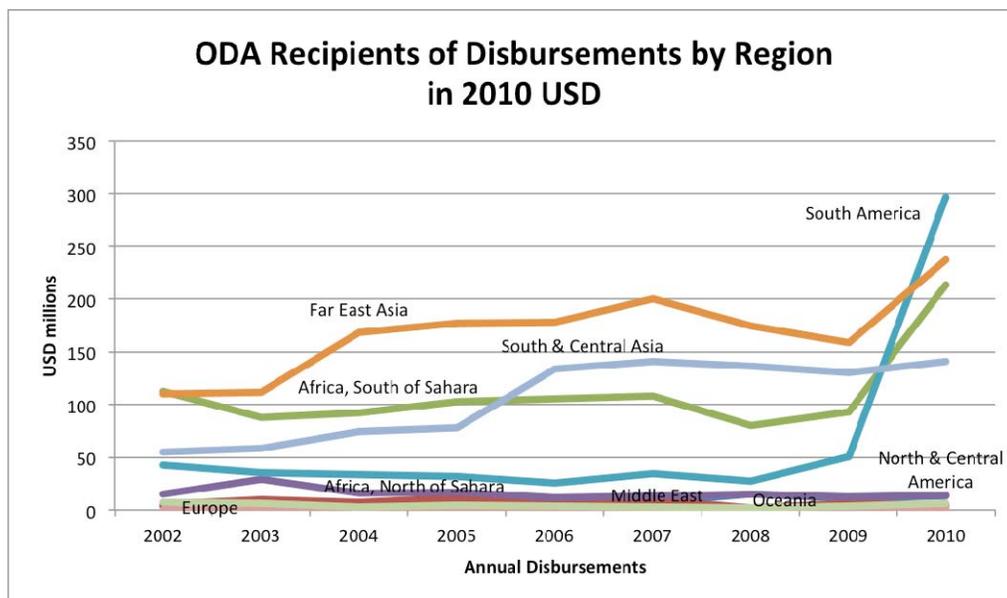
⁵⁴ It is important to note that these figures may include loans and other non-grant disbursements.

B. Recipients of ODA

58. Examining disbursements in further detail, it is possible to see that ‘Far East Asia’ and ‘South and Central Asia’ as termed by the OECD have historically received the bulk of funding for forests (see Figure 1.2 below). These countries include China, Vietnam and India, as well as Brazil, as the major recipients of funding (see Figure 1.3). There has been a continuing increase of disbursements to forests for all the major recipients. The major recipients of funding disbursements are China, Vietnam, India and Brazil.

59. Flows to ‘Unspecified’ recipients, mainly multilateral and regional organizations, have increased between 2002 and 2010, though there was no funding reported for regional organizations or initiatives in South Asia, the West Indies and the Middle East. Europe, North and Central America, Oceania, Africa North of the Sahara and the Middle East continue to lag behind their larger and more forest-rich counterparts in terms of commitments.

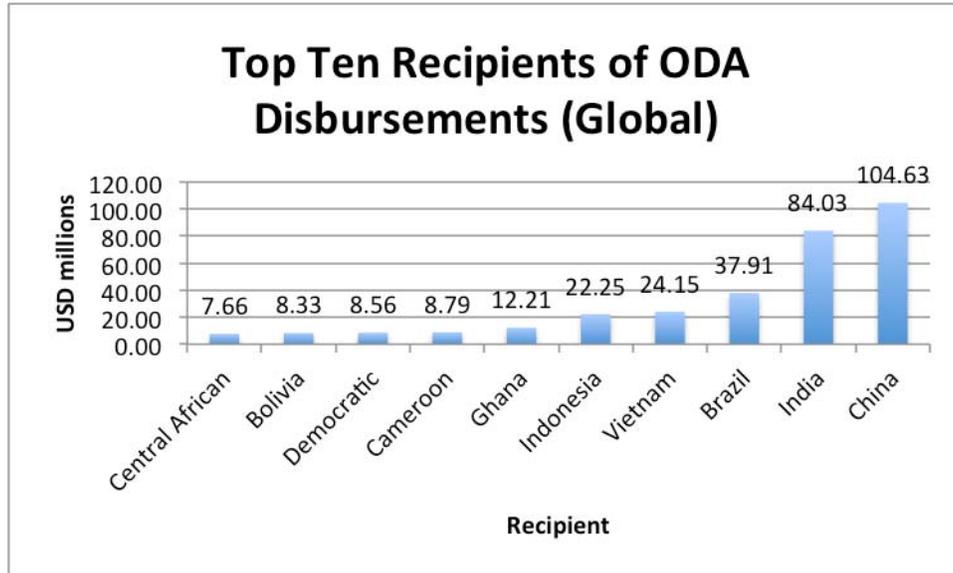
Figure 1.2 Recipients of Forestry ODA Disbursements, 2002-2010



Adapted from: OECD.Stat, accessed 24 May 2012.

60. Despite relatively high levels of funding in the region south of the Sahara in Africa, there are no extraordinary recipients of funding as in Far East Asia and South & Central America. Cameroon, Central African Republic, Democratic Republic of Congo and Ghana each receive on average USD 7-12 million per year. What makes this region stand out from the others is that disbursements are not consistent from year to year (see Appendix D), and there are no large recipients overall, compared with other regions.

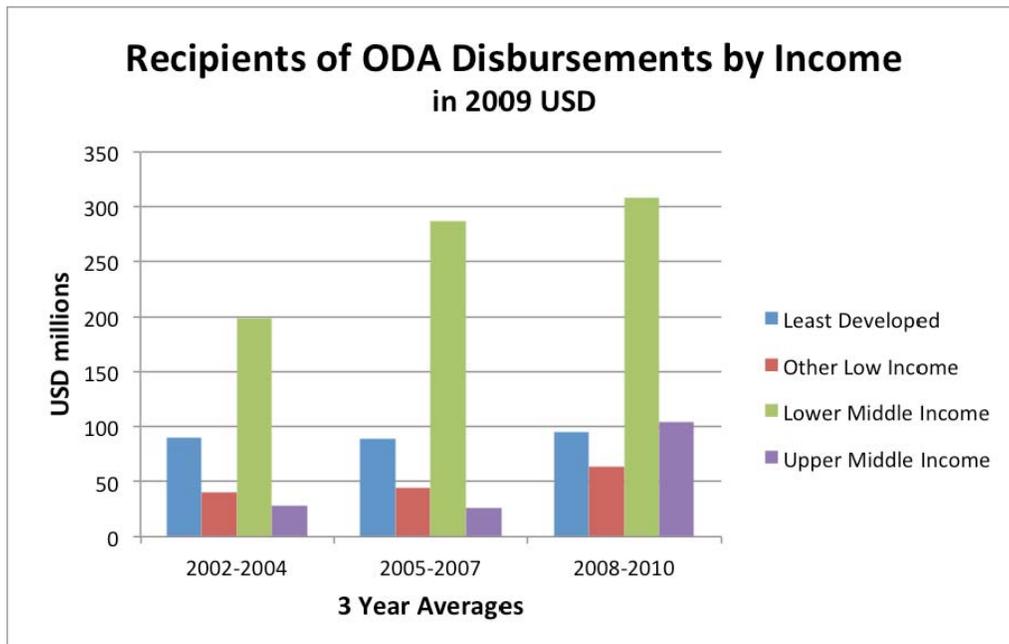
Figure 1.3 Top 10 Recipients of ODA Disbursements



Adapted from: OECD.Stat, accessed 24 May 2012

61. ODA disbursements analyzed by income group indicate that middle income countries continue to receive the most funding to forests, though for the period 2008-2010 the wide gap for both commitments and disbursements began to shrink. This period is also marked by a dramatic increase in disbursements to upper middle-income countries (Figure 1.4).

Figure 1.4 Forestry ODA Disbursements by Income Group, 2002-2010



Adapted from: OECD.Stat, 15 January 2012.

62. Among all recipients of ODA, 27 countries reported no funding to forests between the periods 2002 and 2010. Of these countries, 40% are considered high forest cover countries, 30% medium forest cover countries, and 30% low forest cover countries. A total of 63% of all countries are Small Island Developing States, with the breakdown of SIDS outlined below in Table 1.5.

Table 1.5 Countries that Received no ODA to Forests, 2002-2010

	Percent by forest cover (27 total)	SIDS (17 total)
High forest cover	40% (11)	53% (9)
Medium forest cover	30% (8)	29% (5)
Low forest cover	30% (8)	18% (3)

Adapted from: OECD.Stat, 15 January 2012.

63. The total volume of forest ODA allocated to LFCCs decreased significantly between 2002 and 2008, with a drop observed from USD 17 to 12 million. The drop in the portion of LFCCs among forest ODA recipient countries is even sharper over the same period – from 7% to 2%. The distribution of forest ODA among LFCCs is also highly skewed, with Tunisia receiving 28% of the share, in front of Pakistan with 12% and Kenya with 10%, while five other countries total 29% and the remaining 41 countries received only 21%.

64. ODA remains the main source of forest financing in SIDS, although levels have dropped significantly from a yearly total of USD 8 million to USD 6 million between 2002 and 2008, with a dip to only USD 3.5 million in 2006. Over the same period, SIDS' share of the world's forestry ODA dropped from 3% to 1%. Moreover, ODA distribution by country is highly skewed, with Papua New Guinea receiving close to a third of all forestry ODA allocated to SIDS, another nine countries receiving 61%, while the remaining 28 SIDS together received 7%. This distribution primarily reflects countries' forest cover.

1.2.3 Demand for Forest ODA

65. Bilateral aid agencies, as well as multilateral finance institutions, are public international sources of financing for forests. Demand for bilateral ODA is influenced by suppliers' policies and budgets, whereas situations involving multilateral sources are characterized as more demand-driven.

66. The 2008 AGF/CPF study described an interdependent relationship between supply and demand for forest ODA,⁵⁵ and thus examined poverty reduction strategy papers (PRSPs) to determine potential demand (if any) for forestry ODA. PRSPs are intended as planning instruments prepared by low-income and other countries to guide development and poverty

⁵⁵ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests* (2008), p. 25.

reduction. Established by the World Bank and the International Monetary Fund (IMF) in 1999, they are also used in bilateral consultations to negotiate future commitments for ODA.

67. The previous AGF/CPF study analyzed 43 PRSPs to determine how forest issues were addressed. Some criteria were then outlined in a table with focus on whether the PRSPs contained “(i) a treatment of forest issues, including a significant analysis of the role of forests; (ii) an analysis of the main challenges encountered in the forest sector; (iii) a design of policy and institutional responses to address these challenges; and (iv) a coherent strategy of policy and institutional reforms.”⁵⁶

68. This study also analyzed PRSPs utilizing the same criteria. As of February 2012, 21 of the 43 countries mentioned above maintained the same PRSPs as analyzed in 2008. Using these 21 PRSPs as a control, 60 PRSPs were analyzed for this study, resulting in a table (see Appendix E) and using the following methodology:

- i. Identify countries with PRSPs utilized in the 2007 analysis (21 countries based on pre-2006 PRSPs);
- ii. Qualitatively identify the criteria used to determine whether a PRSP discussed the above four categories;
- iii. Identify those countries with updated or new PRSPs after 2006;
- iv. Qualitatively analyze the post-2006 PRSPs following the criteria from the 2007 study.

69. Of the 60 PRSPs, 60% discussed in some detail the links between forests and livelihoods, including poverty alleviation and rural development (Table 1.5). This figure is similar to the 65% figure identified in the 2008 study. In 2012, 56% of PRSPs provided a description of forest sector problems, challenges and issues, compared with 48% in 2008. The percentage of policy and programme responses to address challenges in the forest sector remained steady at 58% compared with 53% in 2008. The percentage of PRSPs that included a coherent strategy to implement policy reforms and programmes remained the same for both studies at 48%.

70. The fact that the percentages remain statistically similar between the two studies indicates that the demand for forest ODA, as measured qualitatively by discussions of forests in PRSPs, has remained steady since 2007. This is not entirely surprising, as 35% of the PRSPs analyzed were the same from the previous study, which were reported in 2006 or earlier and not updated. Of note, only 11 PRSPs were submitted between 2008 and 2011, indicating a lag in identifying forest priorities in PRSPs.

⁵⁶ Hermosilla and Simula, *The World Bank Forest Strategy: Review of Implementation* (2007), pp. 7-9.

Table 1.6 Inclusion of Forests in PRSPs by Number and Percentage

Year of Analysis	Description of the links between poverty and forests, and that between forests and growth	Policy and programme responses to address the challenges identified in the sector	Coherent strategy to implement the policy reforms and programmes, including financing options
2007	28 (65%)	23 (53%)	12 (28%)
2012	36 (60%)	35 (58%)	17 (28%)

Adapted from: World Bank database of Poverty Reduction Strategy Papers.

1.3 Private Financing (National and International Sources⁵⁷)

71. Actors/stakeholders that fall under this category, apart from the public sector, are the owners of forestlands, the owners of the natural resources on those lands, or users with customary or granted access to forest resources. They can be large landowners, small farmers and rural communities investing in natural and planted forests, both for wood and non-wood purposes.

72. Self-financing is the main source of finance for forest enterprises, with two additional primary sources of private financing: (1) the capital market, which consists of institutional investors or loans from national or international banks, sometimes with subsidies, and (2) the informal capital market, which is comprised of middlemen – moneylenders and other intermediaries. The latter source is favored by SMEs and small private owners of forests.

73. Medium and large enterprises have a variety of sources of financing: self-financing, venture capital and private banks. It is still accepted that private capital is the main source of financing, and that private financing is focused on industrial processing rather than forest management. Small-scale investors, who are mainly small sawmills or chainsaw operators, rely in large part on informal moneylenders, but not much is known about how this works or its extent. Venture capital is accessible by enterprises with a high performance and projects with expected high profitability forecasts. Traditional banks favor already operational enterprises and not new ones.⁵⁸ It should be noted, however, that the gap between business management abilities in forest organizations and those abilities normally demanded by financiers also contributes to the lack of funding flows.

⁵⁷ A few examples of private sector financing initiatives on forests are contained in Annex 1.

⁵⁸ Kees van Dijk and Herman Savenije, “Towards National Financing Strategies for Sustainable Forest Management in Latin America” (FAO, 2009).

74. In the private sector, Foreign Direct Investment (FDI) and especially Domestic Direct Investment (DDI) contribute heavily to forest financing. Activities under this scope include companies that produce wood and non-wood forest products (NWFPs), such as pulp and paper, wood panels and solid wood products in the former category, and palm oil, rubber and cocoa in the latter. Timberland Investment and Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs), as well as pension funds are also part of the private sector, although each of them plays different role. It is difficult, however, to identify the share of FDI and DDI going toward forests, due to the cross-sectoral benefits of forests.

75. Other private funding sources are non-governmental organizations (NGOs), foundations, philanthropic organizations and others, investing money in forest-related projects, especially those related to capacity building and payment for environmental services (PES). These groups, including social NGOs, tend to be characterized as “soft” investors, as their goals tend towards social or economic returns rather than fiscal.

76. There is still a need for extensive coordinated efforts to collect and extract national data on the private sector’s investments, as information on these types of investments are not easily identified in a comprehensive manner. As an example, over the past decade it has been estimated that the forest sector in many African countries contributes an average of 3% to the GDP. A number of researchers however indicate that if trade in this sector were to be comprehensively documented, a combination of industrial wood products, ecotourism and NWFP would contribute close to 20% of GDP in the region.⁵⁹

77. Private sector investments are mainly linked to forests managed for wood production, from natural forests and from plantations. In a few cases private sector investments made in timberlands for wood production are later converted into conservation areas, for protection or environmental services, or to other land uses. There are also investments in non-wood forest production, but they are less significant.

78. While non-wood forest production markets are not comprehensively tracked or documented, it is recognized that in places like Africa and Asia there is a growing trade, most of which occurs in the informal sector and thus is rarely captured in national trade statistics. In addition, ecotourism is noteworthy, especially in countries like Ghana, Kenya, Zimbabwe, Botswana, Namibia, Thailand, Viet Nam, Mexico, Peru and Central America.⁶⁰

79. The private sector has over the past few years developed new forest-related financing initiatives, with the intention of improving the investment climate to attract new investors. These initiatives are linked to new market investors and forest cover as assets. The idea is to diversify portfolio investments of institutional investors, offering a long-term low risk (low standard deviation) investment alternative, with a relatively high return.⁶¹ The new investors generally come from outside the forest industry and have few other connections with the forest sector.

⁵⁹ Peter Gondo, Forest Financing in Africa, UNFF Study (March 2012).

⁶⁰ Peter Gondo, “A Review of Forest Financing in Africa,” UNFF Study (March 2012), p.13.

⁶¹ IWC, “Timberland Investments in an Institutional Portfolio” (2008).

80. Based on experience in Northern temperate forest areas in Western Europe and North America, forests have some characteristics that make them attractive to institutional investors. The returns on these forestland investments come from biological growth, upward product class movement, timber price appreciation and land price appreciation.

81. One key benefit is that they are seen as *countercyclical*, where returns are negatively correlated with other assets like bonds and stocks. Therefore, for example large pension funds, insurance companies, endowments and foundations have shown interest in investing in timberland as a small part of their diversified investment portfolios. Often these funds operate by working with TIMOs or REITs,⁶² which manage the land on behalf of investors. These can mainly be found in the USA but in recent years, there has been increasing interest in international TIMOs and REITs as well. Increase of private investments from institutional investors is very much dependent on the overall investment climate, clear land management and rights, rule of law and efficient judiciary to name a few factors. It is not only driven by the forest resource and its availability.

82. Global statistics on institutional investments are not entirely reliable. Industry estimates based on a number of sources state that the total area managed by the funds would be roughly 25–30 million hectares, 75% of which would be in the USA and majority of the remaining 25% would be located in Australia, New Zealand and Latin America. Total investments would be in the range of USD 50-80 billion.

83. Other new forest-related financing initiatives are in most cases associated with international organizations, multilateral environmental agreements (MEAs), joint initiatives, and regional and country initiatives. The private sector's involvement will continue over the next few years, with the expectation that investment portfolios will become further diversified. The new initiatives will have strong implications on financing forest activities, particularly in terms of the availability of funds for investments in forest plantations for wood production, especially in some regions such as LAC and Africa.

84. An increased interest from the private sector in investing in planted forests shows that this is an economically feasible and a competitive business opportunity. The role of the public sector to support investments is to improve the business environment to further attract investments in planted forests, including on: (a) governance, (b) land titling and (c) capacity building.

85. A growing demand for forestry products, especially construction materials in some regions, has also provided a strong ready market. Asia is a traditionally large producer of tropical timber, with annual averages of two-and-a-half times that of Latin America and the Caribbean and more than four times that of Africa.⁶³ Plantations have been established in Southeast Asia primarily for the production of sawlogs, pulpwood, bioenergy and rubber production.⁶⁴

⁶² The main difference is in the ownership of the actual real estate, such as forestland being managed.

⁶³ Blaser et al, Status of Tropical Forest Management, (ITTO, 2011).

⁶⁴ Asia-Pacific Forestry Commission, Sector Outlook Study II (2010).

86. The growth of both domestic and international markets for non-wood forest products provides a market and investment opportunity especially in low forest cover countries. However, some of these countries need external support to catalyze domestic forest financing.

87. In the Latin America and Caribbean region, USD 2.7 billion per year is contributed from the private sector, the largest source for financing forestry in the region. In these countries the main private investors in forestry are pulp and paper companies planting predominantly eucalypt and pine for their own industrial supplies. Other investors are institutional investors, consisting primarily of pension funds investing directly or through Timber Investment and Management Organizations. TIMOs invest mostly in pine, eucalypt and teak plantations to sell wood in the open market. These investments are more easily identified, given the magnitude of resources involved.⁶⁵

88. In Africa, large private sector companies are mostly active in integrated processing industries and plantation forests. Despite the adoption of economic liberalization policies, many countries in Africa have limited domestic large scale formal private sector participation in forestry, particularly in the areas meaningful to sustainable forest management. Until recently the countries that have significant private sector investment in the forestry sector included South Africa, Zimbabwe and Swaziland. South Africa has over 1.2 million hectares of forest that are managed by 14 large corporate companies. In Zimbabwe, the industry is dominated by five corporations. These companies are vertically integrated managing the plantations and also running their own processing facilities especially sawmills and pulp mills. Recent trends indicate that formal private sector investment has been propelled by enactment of policies that deliberately support local investors. Other Governments like in Tanzania are engaging in dialogue with local banks and supporting technology development, the two main factors that constrain investment in the sector. In Mozambique, the Mozambican Association of Timber Operators indicated that at least ten to fifteen companies out of 126 registered concession holders (on 5.2 million hectares) are relatively large local companies that have a significant share of the forest business especially in indigenous forest industries. In South Africa medium growers – tree farmers with forest areas up to 1,000 to 1,300 hectares control 22% to 23% of forest area.⁶⁶

89. In the African region, forest sector entry barriers have tended to promote investment by locals in small to medium scale forest enterprises rather than large companies. Investment has been directed more toward harvesting indigenous forest concessions and related timber value chains, small scale saw milling from plantation and indigenous forest ecotourism in forest protected areas. There is a potential to increase the private sector's investments in the region through improved access of the private sector to credit, especially for plantation development given the long-term nature of the enterprise, insecurity of tenure and policy inconsistencies, e.g. the logging ban and land reform.

90. In Indonesia, the private sector contributed an average of USD 12.33 billion for the period 2005-2007, and an average of USD 21.1 billion for 2008-2009.⁶⁷ These revenues

⁶⁵ Ivan Tomaselli, Forest Financing: Latin America and Caribbean Region, UNFF Study (March 2012).

⁶⁶ Peter Gondo, Forest Financing in Africa, UNFF Study (March 2012).

⁶⁷ Mr. Yetti Rusli, representative of the Government of Indonesia, presentation at UNFF AHEG1, Nairobi, Kenya, September 2010.

stemmed from forest concessions and industrial forest plantations, the latter of which generated approximately double the revenues of the former. However, the domestic investment landscape in Indonesia exhibits the following characteristics: private actors invest heavily in productive investments, while public actors invest in the more innovative investments. Some constraints facing private investments identified by the Ministry of Forestry in Indonesia include notions that forests are not ‘bankable,’ forests are not as competitive as other commodities such as agriculture and plantations, and long-term investments in forests are risky due to uncertainty with natural disasters.⁶⁸

91. Mobilization of forest investments from the smallholder sector has the potential to harness significant resources for forest management. Given the status of commercial capital markets, the role of microfinance becomes key. A variety of microfinance institutions (MFIs) have emerged over time in some regions like Africa to bridge this gap. While the MFI initiatives could not be quantified in some regions, it is estimated that there are now over 970 MFIs serving 27 million microfinance client accounts in Africa, representing about 4% of the population.⁶⁹ In Mozambique there are estimates that about 12 well established microfinance initiatives are in place to support small and medium enterprises (SMEs).⁷⁰

92. Most forested lands in the region are under the control of smallholder farmers. Many countries in the region have adopted and are institutionalizing community-based forest management. The associated community-based forest groups (CBFGs) have the capacity to increase their contribution to forestry development. There is clear evidence that, with a little support and improved security of tenure, smallholder farmers can mobilize massive investment into forestry, especially toward plantations and trees outside forests.

93. This has also already been demonstrated amply by some smallholder farmers especially in east Africa who are investing in woodlots and small plantations. For example, 55,000 farmers in Western Kenya have invested about USD 16.5 million in one season, planting a total of 27,500 hectares (in 0.5 hectare plots at an average cost of USD 600 per hectare). In Niger, farmers have rehabilitated more than 5 million hectares of woodland through assisted natural regeneration in about 10 years at an investment worth more than USD 1.5 billion (at an average cost of USD 300 per hectare).

94. These investments are made possible by the adoption of favorable policies and legislation that allow smallholder farmers to benefit from the forests and trees that they plant and manage. Favorable trade and industrial policies that allow for the growth of forest industries and markets for forestry products are also critical. In addition it is important to improve access to finance, especially credit for the smallholder farmers to make them able to augment their own savings and invest in forestry activities. The saw-log production scheme and the financing products provided by Commonwealth Development Corporation in South Africa provide good examples. Policies that support out-grower schemes (e.g. policies providing security of tenure) are also important for mobilizing resources for smallholder farmers.

⁶⁸ Ibid.

⁶⁹ Peter Gondo, “Financing Sustainable Forest Management in Africa”, (2010).

⁷⁰ Nhancale et al, *Small and Medium Forest Enterprises in Mozambique*, (2009).

95. Changing growth patterns has led to changing trade flows, which has further led to the re-localization of industrial processing. These developments have generated new investment in developing countries, especially in resource creation (plantations) and processing. These investments have created new markets for smallholders and community forests to supply the new industrial operations. There is less attention from forest-related industries to forest plantations, which should be addressed including through: (1) focusing development policies on actions to increase the competitiveness of operations, (2) identifying supra, inter and intra sectoral factors that affect competitiveness and (3) political commitments to implement actions to change.

96. In some regions such as Africa, only a small proportion of the population in most countries has access to formal banking services. Therefore, it is important to improve access of this population and formal institutions to microfinance, as most SMEs by nature of their location have very limited access to deposit and credit facilities and other financial services. This is due to the limited outreach of the formal banking sector, which is mainly confined to urban centers. Improving access to financial services from the formal financial system is key to the growth of the small-scale forest producers and SMEs. Lack of such access has led SMEs in Africa to operate in the informal sector and mobilize personal or family savings to finance their activities. With income levels so low especially in rural Africa, this places serious constraints on the scale of activities possible.⁷¹

97. In the past, FDI flows were all from the north to the south. However, new FDI flows in the forest sector increasingly originate in the three developing regions. For example, Chile is investing heavily in other LAC countries, China is investing in Asia and Africa (and to some extent LAC), and Malaysia is investing in the Asian region as well as Africa. The pattern is rapidly changing to more south-south relationships, though the north-south dynamic of FDI flows remains as it had been before with the forest industry and institutional investors as the main actors.

98. The flow of FDI to the forest sector in Africa has generally been low and unevenly distributed and has been concentrated in forest-rich countries that are stable and low risk. For example in West Africa FDI has been concentrated in Cote d'Ivoire, Ghana, Liberia and Sierra Leone. In recent years there has been growing interest and investment in non-wood forest products in low forest cover countries albeit at a smaller scale and in small-to medium sized companies. Examples include investments in biofuels (e.g. jatropha production), shea butter and in the tree crops sector through mainly cashew, cocoa and mango.⁷²

99. In terms of attracting foreign direct investments and other investments (i.e. large local companies), governments need to create enabling conditions for investment through policies and legislation that provide security of tenure. They also need to create and maintain stable macro-economic conditions that ensure security of investments such as stable political conditions and effective forest law enforcement and governance. This is clearly illustrated by the investments that are taking place in Liberia and Mozambique following the stabilization of the political and macro-economic conditions following decades of civil war. Furthermore, more new and

⁷¹ Kamara Existing and Potential Forest Financing Mechanisms for Smallholders and Community Forestry in West Africa (2011).

⁷² FAO, State of the World's Forests (2011).

additional financial resources can be mobilized through improved partnerships between financial institutions and the private sector.

1.3.1 Philanthropic⁷³

100. Philanthropy as a source of finance includes contributions from private foundations, business-related foundations and conservation NGOs such as the Nature Conservancy and the World Wildlife Fund. Large philanthropic foundations generate revenue through an initial endowment that is usually managed in perpetuity.⁷⁴ The finance available for charitable distribution from these endowments is directly dependent on the success of the commercial investments made by the foundations, since the investment returns are then used to deliver philanthropic grants. Conservation NGOs on the other hand generate revenue from a variety of sources including subscription fees, foundations and government contributions.

Box 1.7 Leveraging Private Funds through Public Private Partnerships, USFS and Ducks Unlimited

The US Forest Service International Programs division partners with Ducks Unlimited, a private NGO, on a variety of programs such as the Western Boreal Forest Initiative, the Copper River International Migratory Bird Initiative on the Chugach National Forest, and on reservoir programs and trainings. Through the Western Boreal Forest Initiative, Ducks Unlimited, US Forest Service, and other partners are studying wetland ecology, wetland resources and particularly migratory bird needs to obtain a clearer sense of how human activity in the area is affecting the wetlands, especially the migratory birds they support. The goal is to determine how the biodiversity and productivity of the region including migratory birds can be sustained and protected while land-use practices continue. The Cooper River International Migratory Bird Initiative on the Chugach National Forest connects partners and shorebird sites in the Americas to protect and enhance shorebird habitats and sustain shorebird populations. Over five million shorebirds stop over on the Delta each year during their migration to Mexico, Central, and South America.

Source: Author's correspondence with Ms. Catherine Karr-Colque, UNFF National Focal Point for the United States, 15 February 2012.

101. Philanthropic funding represents a significant source of forest financing in some countries and regions. In eastern and southern Africa, among the 15 largest foundations eight specify forest-related issues for their grants, such as protected areas, land rights and the rights of indigenous peoples.⁷⁵ Two new mechanisms that have been successfully used by philanthropic organizations to support tropical forestry projects are programme-related investments and recoverable grants. The latter entail the payment of grants that must be repaid, but at very low interest rates. There are many examples of philanthropic support to forestry in the region and these include the support to forestry conservation in Zambia by the Bill & Melinda Gates

⁷³ A few examples of philanthropic and NGO financing initiatives on forests are contained in Annex 1.

⁷⁴ Persson et al., *Adaptation Finance under a Copenhagen Agreed Outcome* (2009).

⁷⁵ A. Hoare, *The Search for Innovative Options for the Forests of the Democratic Republic of Congo* (2008).

foundation and support to small-scale forest enterprises and community forestry by the Ford Foundation in several countries in eastern and southern Africa.⁷⁶ In Kenya, the Forest Action Network receives supported from a church organization to promote tree planting to take advantage of emerging carbon markets and good prices of poles and other timber products. Philanthropic funding thus plays a valuable catalytic role in Africa, helping to test and develop innovative projects and initiatives that would not be supported by the commercial sector. It also helps lay the foundations for sustainable forest initiatives, facilitating the subsequent entry of commercial organizations such as banks with commercial savings and micro-finance schemes.

102. The scale of finance available from grants is not likely to be large. For example, in 2007 the Bill & Melinda Gates Foundation distributed in total around USD 1.9 billion in charitable grants and the Rockefeller Foundation’s long- term intention is to provide the equivalent of around USD 225 million in grants annually.⁷⁷ Although these figures represent only a sample of private sector philanthropy, they go to a diverse set of priorities beyond forest financing; therefore only a fraction of these flows are likely to go towards forests.

103. While the sustainability and predictability of philanthropic grants from the private sector are difficult to estimate, downturns in the global economy will likely negatively impact the level of investment from philanthropy. Although private philanthropy is unlikely to deliver finance at the same scale as other sources of private finance, it can be used for activities that offer no or low returns on investment.

104. The main identified sources of forest financing by philanthropic organizations identified in LAC, for the 2001-2011 period, are presented in Table 1.7. The investments of the main philanthropic organizations in forest programmes/projects there were an average of USD 47 million per year.

Table 1.7 Primary Identified Sources of Forest Financing by Philanthropic Organizations in LAC (2001-2022)

INVESTOR	COUNTRIES		PERIOD		VALUE (USD MILLION)		SHARE
	INVESTOR	INVESTED	FROM	TO	TOTAL	ANNUAL	
CI	United States	Peru	2010	2010	3.5	3.5	7.5%
EcoFund	United States	Ecuador	2005	2022	16.9	0.9	2.0%
FUNDESNAPE	United States	Bolivia	2003	2013	21.2	1.9	4.2%
Helvetas	Switzerland	Peru	2006	2011	10.0	1.7	3.6%
Moore Foundation	United States	Brazil	2001	2008	200.0	25.0	53.3%
TNC	United States	Costa Rica	2006	2007	26.0	13.0	27.7%
World Cocoa Foundation	United States	Ecuador	2008	2009	1.8	0.9	1.9%
TOTAL					279.4	46.9	100.0%

Source: Ivan Tomaselli, Forest Financing: Latin America and the Caribbean Region (2012).

⁷⁶ Peter Gondo, Financing Sustainable Forest Management in Africa (2010).

⁷⁷ Persson et al., Adaptation Finance under a Copenhagen Agreed Outcome (2009).

1.3.2 NGOs

105. The combined annual budget of five international environmental NGOs was estimated as USD 2 billion in recent years.⁷⁸ In most countries of Africa, NGOs are also major contributors to sustainable forest management. International environmental and conservation NGOs provide substantial funding to the eastern and southern African countries for various purposes including forest management biodiversity and environmental conservation. They include international NGOs, small grassroots community based organizations (CBOs), national and regional NGOs. Unfortunately it is not easy to ascertain the amount of financial resources mobilized through these institutions, as financial details of their investments are not readily available. Interviews with a few NGOs reveal that most of the NGOs rely mostly on the international donors and philanthropic organizations for funding with only a very small proportion coming from founder members.

Conclusions

106. Analysis of domestic flows of financing to forests indicates a general growing attention to forest financing and its significance for improving the overall socio-economic and environmental situation in both developed and developing countries. Of course, progress has been made unevenly among countries and regions. While the overall national public financing for forests still remains relatively low in many countries, in particular in many developing countries, the carbon-content potential of forests as well as timber values of forests have attracted much of the public international funding as well as the national and international private sector's resources.

107. Many developed and developing countries have taken serious steps to improve financing for forests including by establishing specific national funds for forests as well as by undertaking policy and regulatory measures and institutional reforms to further attract the private sector's resources.

108. Despite the global economic downturn, there has also been a general increase of donor countries' support in both public bilateral and multilateral flows to forestry, largely marked by REDD+ readiness activities, as well as pilot programmes including fast-start funding. Examining ODA flows (commitments and disbursements) to forestry indicates that 'Far East Asia' and 'South and Central Asia' have historically received the bulk of the funding. However, this situation is changing, with funding to Africa and Latin America growing significantly. A majority of all ODA for forestry goes to China, Vietnam, India and Brazil, with no clear 'powerhouses' that have emerged among African countries south of the Sahara. Similarly, a majority of ODA flows continue to be directed towards middle-income countries. This presents an opportunity to engage those African and low income countries that have an interest in capturing some ODA flows to forestry.

⁷⁸ Gutman and Davidson, A Review of Innovative International Financial Mechanisms for Biodiversity Conservation: With a Special Focus on the International Financing of Developing Countries; Protected Areas (2008).

109. While it is possible to group and analyze forest flow trends among countries based on characteristics (such as forest ownership structures, forest cover, forest quality and designated functions of forests) to obtain a clearer picture of domestic funding to forests, observing each characteristic individually does not sufficiently account for all situations.

110. Major effort and commitment at all levels are required in order to improve monitoring and assessment of forest expenditures and required financing at both domestic and global scales. The establishment of systematic, comprehensive and coordinated networks of data collection on forest financing with a focus on the implementation of the forest instrument appears to be vital to assess flows of financing to forests at all levels, and is a necessity to assess the needs and forecast the required finance.

111. The private sector is considered to be the main contributor to and the future of forest financing, due to the fact that the suite of private financing arrangements are flexible and numerous. However, it is difficult to track these flows due to the lack of a systematic means of counting the plethora of flows at all scales coupled with less transparency in both informal and formal capital markets. It is possible, however, to support existing arrangements, as well as new ones, by developing and supporting institutional, business and private capital instruments and conditions that facilitate access to such data.

112. The involvement of the private sector has several implications. It has incorporated other concepts and views into the decision-making process, and more discussions are now required to reach a consensus. This has made the process more democratic by enlarging the number of stakeholders and has created the tendency to make available additional funds.

113. There is an increased interest for the private sector to invest in activities that have an indirect impact on REDD+, such as: afforestation, reforestation and SFM projects; value-added processing to make timber extraction more efficient; and investing in more intensive farming techniques.

114. The rapid expansion of microfinance institutions and services has provided an opportunity for increasing access to financial resources for the smallholder sector. What needs to be done is to facilitate the development of appropriate financial products and services that are suited to the forest sector and needs of smallholder farmers and SMEs.

CHAPTER 2: EXISTING, NEW AND EMERGING FOREST RELATED FINANCING MECHANISMS AND INITIATIVES

Introduction

1. The growing recognition of the multiple values and functions of trees and forests has resulted in many initiatives aimed at identifying the financial and other requirements needed to achieve sustainable forest management. In response to these requirements several initiatives at the global and national levels have developed strengthened mechanisms for mobilizing financial and other resources. In the last decade these initiatives have been dominated by the development of innovative financing mechanisms related to the role of forests in carbon sequestration and payments for ecosystem services.
2. The establishment of the Rio Conventions in 1992 – the Convention on Biological Diversity (CBD), the Convention to Combat Desertification (UNCCD) and the Framework Convention on Climate Change (UNFCCC) – set the tone for donor countries to commit to assisting developing countries address the respective issues of these conventions. The type of financing activities that initially took shape, particularly with regard to activities related to sustainable forest management, more closely resembled the structured development assistance programmes.
3. Within the decade after Rio, the international financing structure experienced a shift, trending toward innovation using economic instruments. The late 1990s and early 2000s saw the Kyoto Protocol and particularly the Clean Development Mechanism (CDM) of the Protocol, as well as debt-for-nature swaps and Forest Law Enforcement and Governance Programmes (FLEG) increase in significance in the funding landscape.
4. After the mid-2000s the trend continued towards the diversification of economic instruments, where governmental and intergovernmental actors became more facilitators and regulators, giving more of a role to private sector actors. This is especially pronounced in the voluntary carbon markets, which experienced a two-fold increase in spending on forest-related activities between 2009 and 2010, both in anticipation of an agreement on REDD+ as well as other regulatory systems to be put into place.
5. This chapter highlights the opportunities for forest financing at the national, regional and international levels. Funding associated with some of the existing mechanisms, as well as the issues of good forest governance, law enforcement and innovative financing beneficial to forests (such as PES), are also reviewed. The existing financing mechanisms, as well as new and emerging mechanisms designed to meet the overall objectives of the three Rio Conventions (and are simultaneously of relevance to forests) are also reviewed. The main objective of this review is to increase understanding of the trends of financing within these conventions, in particular with regard to the climate change-forest agenda, and to assess their implications on financing forest-related activities. The list of mechanisms is not intended to be exhaustive, and the information is gathered only on some of the major mechanisms and initiatives.

6. The themes in this chapter are important, but they are not the only elements that affect the flow of finance to forests. Several bilateral and multilateral funds, such as the Fonds Français pour l'Environnement Mondial, as well as many NGO programmes and projects, are also important in this area though not highlighted in this chapter. As discussed broadly in Chapter 1, private financing is also a significant element impacting flows to forests, with those markets and actors interacting with many of the following forums.

2.1 Forest-related Financing and the Convention on Biological Diversity

7. The Convention on Biological Diversity (CBD) is a global, legally binding treaty for the conservation and sustainable use of biodiversity. Established in 1992 at the UN Conference on Environment and Development, also known as the 'Earth Summit' held in Rio de Janeiro, the CBD came into force at the end of 1993 and has three main objectives: (1) conservation of biodiversity, (2) sustainable use of its components and (3) fair and equitable sharing of benefits arising out of the utilization of genetic resources.

8. With regard to finance, the Convention acknowledges that *“the provision of new and additional financial resources and appropriate access to relevant technologies can be expected to make a substantial difference in the world’s ability to address the loss of biological diversity,”* and that *“special provision is required to meet the needs of developing countries.”*⁷⁹

9. Article 20 of the Convention specifically requests each Party to *“provide, in accordance with its capabilities, financial support and incentives in respect of those national activities which are intended to achieve the objectives of this Convention, in accordance with its national plans, priorities and programmes.”* Developed country Parties are also required to *“provide new and additional financial resources to enable developing country Parties to meet the agreed full incremental costs to them of implementing measures which fulfill the obligations of this Convention.”*⁸⁰

10. At COP9 the Parties adopted a strategy for resource mobilization to significantly enhance international financial flows and domestic funding for biological diversity with the goal of achieving a substantial reduction in the current funding gaps for biodiversity.⁸¹ The strategy for resource mobilization contained the specific goal of exploring *“new and innovative financial mechanisms at all levels with a view to increasing funding to support the three objectives of the Convention.”*⁸²

11. The CBD addresses forest biodiversity directly through the expanded programme of work on forest biological diversity,⁸³ adopted in 2002 by the Conference of the Parties (COP) at its sixth meeting. The forest work programme constitutes a broad set of goals, objectives and activities (12 goals, 27 objectives and 130 activities) aimed at the conservation of forest

⁷⁹ Stated in the preamble to the Convention (<http://www.cbd.int/convention/articles.shtml?a=cbd-00>).

⁸⁰ From Article 20 of the Convention (<http://www.cbd.int/convention/articles.shtml?a=cbd-20>).

⁸¹ The strategy for resource mobilization is annexed to decision IX/11 (<http://www.cbd.int/decision/cop/?id=11654>).

⁸² Goal 4 of Decision IX/11.

⁸³ Secretariat of the Convention on Biological Diversity (CBD programmes of work). Expanded programme of work on forest biological diversity (Montreal: 2004), p.22.

biodiversity, the sustainable use of its components and the fair and equitable use of the benefits arising from the utilization of forest genetic resources. In order to implement the work programme, the COP urges donors and the international community to contribute through financing and technology transfers to nationally or regionally identified priorities for forest biodiversity.

12. Activities to reduce deforestation are also supported through CBD's programme of work on protected areas, which aims for the establishment and maintenance of comprehensive, effectively managed and ecologically representative national and regional systems of protected areas. It is further promoted by the programme of work on traditional knowledge, innovations and practice.

13. The revised and updated Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets,⁸⁴ provides a new opportunity for strengthening current efforts to preserve forests and the ecological functions they provide. Aichi Targets 5 and 7 specifically spell out the goals on forests, reemphasizing the need for a targeted action on forest biodiversity conservation at the global scale.

14. During its tenth meeting, the COP further decided to adopt targets for resource mobilization at its eleventh meeting, providing that certain conditions are met (Decision X/3), and also to conduct a specific assessment on the funding needs for the sixth replenishment of the Global Environment Facility (GEF-6) (Decision X/23). The COP also adopted indicators for monitoring the implementation of the Strategy for Resource Mobilization and established the steps for a process to be carried out prior to COP-11, making use of these indicators (paragraph 8). Specifically, the CBD Secretariat is requested to develop methodological guidance, as well as guidelines for the application of the indicators and the establishment of a baseline year.

15. At its eleventh meeting in Hyderabad, India, in October 2012, the Conference of the Parties is expected to consider how to mobilize the financial resources needed to implement the Strategic Plan for Biodiversity 2011-2020 and achieve the Aichi Biodiversity Targets.⁸⁵ A number of initiatives are underway to facilitate the preparations for COP-11 on this issue: (1) Support for the development of Country-Specific Resource Mobilization Strategies; (2) Provision of information on resource mobilization by Parties, making use of the indicators adopted in Decision X/3; (3) Consultations on scaling up financial resources; (4) Assessment of the financial resources needed to implement the Strategic Plan for Biodiversity 2011-2020 and achieve the Aichi Biodiversity Targets; (5) Assessment of the funding needs for the sixth replenishment of the Global Environment Facility.

2.1.1 Global Environment Facility Financing for Biodiversity

16. The Global Environment Facility (GEF) is the financial mechanism of the CBD. Since 1991, the GEF Biodiversity focal area has provided about USD 3.1 billion in grants and leveraged about USD 8.3 billion in co-financing in support of more than 1,000 projects that

⁸⁴ Secretariat of the Convention on Biological Diversity, COP 10 Decision X/2 Strategic Plan for Biodiversity 2011-2020 (2010).

⁸⁵ <http://www.cbd.int/sp/>

addressed the loss of globally significant biodiversity in more than 155 countries. To date, the GEF has invested in 2,302 protected areas, covering more than 634 million hectares by providing more than USD 1.89 billion in funding for protected areas, leveraging an additional USD 5.95 billion in co-financing from project partners. During the fifth replenishment period the goal of the biodiversity focal area is the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services. The focal area continues to finance forests through investments to improve the sustainability of protected area systems and the mainstreaming of biodiversity conservation and sustainable use into production landscapes including the increase in certified forests.

17. Since 2011 GEF is also managing a new multi-donor trust fund – the Nagoya Protocol Implementation Fund. As of September 2011 nearly USD 13 million has been allocated and another USD 2 million pledged for projects. The fund will also help Parties build capacity to ensure appropriate access and use of traditional knowledge associated with genetic resources.

2.1.2 World Bank Financing for Biodiversity

18. The World Bank Group has a long history of supporting biodiversity conservation measures, directly through its regular lending instruments (IBRD and IDA), in partnership with the private sector through the International Finance Corporation (IFC), and as an implementing agency for the GEF. Early loans and credits for biodiversity conservation were made in the late 1980s to Malaysia, Indonesia and Brazil, as part of larger projects.

19. In 1990, the first major biodiversity commitment (of USD 117 million) was made to Brazil (in a National Environment Management loan), followed by a USD 80 million IBRD biodiversity loan to the Philippines. Subsequent lending followed in various Amazonian states, Madagascar, West and Central Africa, Venezuela and Sri Lanka, which all borrowed for protected area activities. Once GEF funding for biodiversity conservation became available, it became important for leveraging biodiversity conservation measures through a wide range of investments. The portfolio also evolved to incorporate biodiversity conservation in a range of rural development projects (such as for land, water, fisheries and forestry management) with blended GEF support.

20. GEF funding for biodiversity conservation through the Bank has attracted large amounts of co-financing. Between 1988 and 2009, GEF-financing for World Bank implemented biodiversity conservation activities totaled USD 1.4 billion and leveraged an additional USD 1.9 billion in IDA and IBRD financing. World Bank-GEF funding peaked at USD 165 million in 2002 and was over USD 150 million as recently as 2006.

21. There has been substantially lower use of GEF biodiversity funds during the GEF-4 replenishment period compared to previous replenishment periods. Since the GEF-4 replenishment, GEF funding managed by the Bank has fallen sharply, to a total of only USD 30 million in the 2009 fiscal year. This has had a knock-on effect on Bank support for biodiversity conservation through its regular instruments. Since 2005, overall World Bank biodiversity funding has declined by 80 percent.

22. The decline in GEF funding through the World Bank as a GEF Implementing Agency (and the loss of its impact in leveraging IBRD and IDA resources) was the result of declining availability of funds per country and of complex implementation rules that led to the fragmentation of resources and to limitations in developing larger-scale GEF projects that are favored by the Bank.

23. Because of the way Bank-financed investments are recorded and reported, it is difficult to tease out the proportion of total funding which has supported forest biodiversity conservation *per se*. Nonetheless, it is believed to be a substantial component of its support for protected area management systems, which features prominently in its biodiversity portfolio. The decline in overall GEF support for World Bank implemented biodiversity conservation activities, while problematic for leveraging IDA and IBRD support for protected area management, has been somewhat offset by a growing overall World Bank forests lending portfolio and the predominance of measures to support sustainable forest management (including forest conservation) within it.

2.2. Forest-related Financing and the Climate Change Convention

24. The UNFCCC was adopted at the Rio Earth Summit in 1992 and entered into force on March 1994. Since then 195 countries have ratified the Convention.⁸⁶ The objective of the Convention is to stabilize greenhouse gas concentrations *"at a level that would prevent dangerous anthropogenic interference with the climate system."*⁸⁷

25. The Convention sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Programmes to implement the objectives of the UNFCCC also emphasize the relationship between climate change and deforestation, which is considered to contribute to climate change more than any other form of land degradation as it results in the release of carbon dioxide and the loss of sequestered carbon in biomass and soils. The work programme of the UNFCCC, therefore, emphasizes the role of conservation and sustainable management of forests in carbon sequestration and carbon dioxide emissions.⁸⁸

2.2.1 GEF Financing for Climate Change

26. As the financial mechanism of the UNFCCC, the GEF invests in projects in energy efficiency, renewable energy, sustainable urban transport and sustainable management of land use, land-use change and forestry. In countries and regions experiencing large greenhouse gas (GHG) emissions from deforestation and forest degradation the GEF promotes land use, land use change and forestry (LULUCF) activities aimed at reducing forest emissions and promoting forest conservation, afforestation, reforestation and SFM. During the fifth replenishment period the GEF has an initial estimate of USD 50 million for projects addressing LULUCF issues. The GEF also manages two separate adaptation-focused Funds under the UNFCCC — the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), which

⁸⁶ UNFCCC, First steps to a safer future: Introducing the United Nations Framework Convention on Climate Change (2012).

⁸⁷ UNFCCC, Full Text of the Convention, Article 2 (2012).

⁸⁸ GEF, GEF Activities Related to Forests (2005).

mobilize funding specifically earmarked for activities related to adaptation, with the latter also earmarked for technology transfer. To date, the LDCF and SCCF funds have made limited contributions to forest-related activities, though their mandates include forest management in adaptation activities as well as the development of national adaptation programmes of action (NAPAs).⁸⁹

27. Although the GEF SFM/REDD+ Strategy relates to all three Rio Conventions, the mechanism is addressed here due to the close linkages to climate change. Since its inception in 1991 the GEF has invested over USD 1.6 billion in more than 300 forest projects. In its fifth replenishment cycle (2010-2014) the GEF will make up to USD 1 billion available for SFM/REDD+ funding. To achieve this it has created a separate USD 250 million funding envelope for SFM/REDD+. This envelope operates as an incentive mechanism for developing countries to invest up to USD 750 million of their allocations from biodiversity, climate change and land degradation for more comprehensive SFM/REDD+ projects and programmes.

28. The programme reflects the guidance coming from all three conventions dealing with forests, for which the GEF is a financial mechanism (UNFCCC, CBD and UNCCD). It adopts the evolving consensus around the SFM concept, as embraced by the Collaborative Partnership on Forests (CPF) and stated in the forest instrument of the United Nations Forum on Forests (UNFF).⁹⁰ 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 all the way to protected forests and to degraded forests in need of restoration. During the fifth replenishment the goal for GEF investments in forests is to achieve multiple environmental benefits from all types of forests by reducing pressures on forest resources and generating sustainable flows of forest ecosystem services and strengthening the enabling environment to reduce GHG emissions from deforestation and forest degradation and enhance carbon sinks from LULUCF activities.

2.2.2 Adaptation Fund

29. The Adaptation Fund (AF) was established to finance concrete adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change. The AF is financed from the share of proceeds on the Clean Development Mechanism (CDM) project activities and other sources of funding. The share of proceeds amounts to 2% of certified emission reductions (CERs) issued for a CDM project activity. The AF has reviewed over 30 projects submitted since its call for projects in April 2010 and has provided over USD 30 million in forest-related investments in 14 countries.⁹¹

⁸⁹ The Green Climate Fund, operating under the UNFCCC, is still being established for long-term finance and will address issues related to REDD+. The Adaptation Fund, under the Kyoto Protocol, is discussed later in this chapter.

⁹⁰ GEF, Investment guidelines for GEF's sustainable forest management and REDD-plus program (2010), p. 2.

⁹¹ Ivan Tomaselli, *Forest Financing: Latin America and the Caribbean Region* (2012).

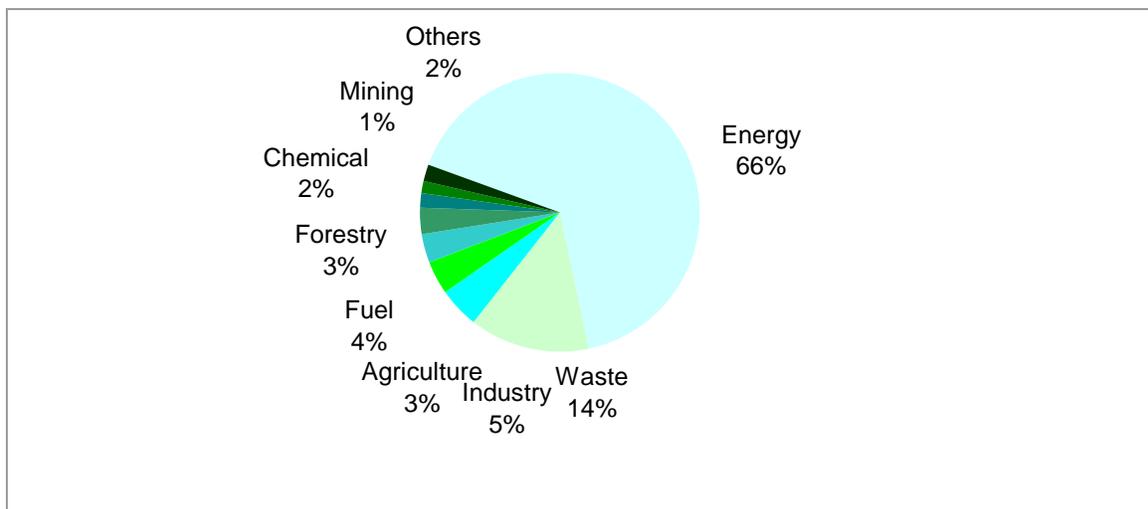
2.2.3 Clean Development Mechanism

30. The Clean Development Mechanism (CDM) was established in accordance with Article 12 of the Kyoto Protocol to the UNFCCC. The CDM allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO₂. To date, some 1,220 projects in 45 countries have been issued a total of more than 750 million certified emission reductions (CERs).

31. The BioCarbon Fund, which supports efforts in the Land Use, Land Use Change and Forestry sector (LULUCF), is becoming the largest purchaser of carbon credits in both the CDM and voluntary carbon markets.⁹²

32. The only forest-related project type allowed under the Clean Development Mechanism (CDM) is Afforestation/ Reforestation (A/R), but this comprises only a small proportion of CDM projects, totaling 0.75% of all registered projects as of September 2011.⁹³ This number compares with 67% of CDM projects relating to energy industries and 14% relating to waste handling and disposal projects.⁹⁴ However, the CDM plays a large role for A/R projects and is credited with 24% of all A/R projects⁹⁵. The CDM projects on fuel efficiency and electrification might also have potential positive impacts on forests. Forest (afforestation and reforestation) accounts for approximately 3% of the total (Figure 2.1).

Figure 2.1 Registered CDM Projects by Scope



Source: Ivan Tomaselli, *Forest Financing: Latin America and the Caribbean Region* (2012).

33. Furthermore, CDM A/R activities are estimated to account for more than USD 634 million for the 37 projects that were initiated between the years 2000 and 2009.⁹⁶ With project cycles ranging between 20 and 30 years with options of renewals in some cases, these types of

⁹² David Diaz et al., *State of the Forest Carbon Markets 2011*, Ecosystem Marketplace (2011), p. 22.

⁹³ Ibid. p. 21.

⁹⁴ Ibid. p. 21.

⁹⁵ Ibid. p. 21.

⁹⁶ See: Ivan Tomaselli, *Forest Financing: Latin America and the Caribbean Region* (2012).

investments can be viewed as relatively stable, long-term financing commitments to forests. It is clear, however, that countries in Latin America and the Caribbean, as well as Asia and the Pacific, currently receive the most from A/R investments under the CDM (see Table 2.2), while Eastern Europe and Africa lag far behind.

Table 2.1 Estimate of A/R Investments under the CDM (2012)⁹⁷

Region	Value (USD Million)		Share
	Total	Years	
Latin America and the Caribbean	292.9	10.8	46%
Asia and the Pacific	208.3	8.4	33%
Eastern Europe	68.3	3.4	11%
Africa	65.4	2.6	10%
Total	634.9	25.2	100%

Source: Ivan Tomaselli, Forest Financing: Latin America and the Caribbean Region (2012).

34. It should be noted that the CDM was extended for a second five-year period, with plans to revise certain methodologies and tools to facilitate access to this mechanism, which was an agreed outcome from Durban.⁹⁸

2.2.4 REDD+

35. Apart from a few forest-related projects under AF and CDM, the key discussions relating to forests within UNFCCC are under the banner of REDD+. There has been great interest in REDD+, within the deliberation of the UN Framework Convention on Climate Change (UNFCCC).

36. Much of this unprecedented attention on forests in recent international negotiations stems from an Intergovernmental Panel on Climate Change (IPCC) report. The IPCC estimates that the world's forests contain 77% of all carbon stored in vegetation and 39% of all carbon stored in soils.⁹⁹ Forest coverage is dynamic; therefore as land cover changes, forests can act as both a source and a sink of carbon emissions. This potential of forests to act as both a source and a sink means that the global forest sector produces an estimated 5.8 gigatons of CO₂ annually.¹⁰⁰ Emissions from the estimated 13 million hectares of forest lost annually¹⁰¹ account for around 17% of global GHG emissions, more than the entire transport sector.¹⁰²

37. REDD+ is primarily about emissions reductions. The Bali Action Plan, adopted at the Conference of the Parties (COP) of the UNFCCC at its thirteenth session, states that a comprehensive approach to mitigate climate change should include: “*Policy approaches and*

⁹⁷ Ivan Tomaselli, Forest Financing: Latin America and the Caribbean Region (2012).

⁹⁸ Forest Carbon Finance Asia, World Bank sees carbon finance role for years (2012).

⁹⁹ IPCC, “Forestry,” in *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007).

¹⁰⁰ Ibid.

¹⁰¹ FRA, Global forest resources assessment (2010).

¹⁰² CIFOR, Simply REDD: CIFOR’s guide to climate change and REDD (n.d.).

positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+) in developing countries.”

38. At COP16 in Cancún, it was determined that developing countries should develop: (1) a national REDD+ strategy; (2) national forest reference emission levels and/or forest reference levels or, if appropriate, subnational forest reference emission levels and/or forest reference levels; (3) a national forest monitoring system; and (4) a system for providing information on how all the safeguards are being addressed and respected in the implementation of REDD+ activities.¹⁰³ Concerns remain, however, over ownership of land and carbon rights and long-term financial benefits to local communities involved in forest mitigation activities.¹⁰⁴

39. COP16 in Cancun produced a negotiated text addressing the scope, principles and safeguards for REDD+, as well as the structure of the phased approach for implementation. Under this agreement a programme of work was launched to explore financing options for Phase 3 activities. Together with reducing emissions from deforestation and forest degradation and conserving and enhancing forest carbon stocks, sustainable management of forests is highlighted as an activity defining the scope of REDD+.¹⁰⁵ Regarding financing, considerable momentum has been growing since Bali.

40. In Durban, an ambitious timeline for the establishment of the Green Climate Fund (GCF) fund was set out with the expectation that under the GCF there will be a window for REDD+ finance. It was agreed in Cancun that the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) should explore financing options for the full implementation of the results-based actions relating to REDD+.¹⁰⁶ An important outcome of the Durban negotiations was the recognition that a broad range of sources including public and private, external and domestic financing can be tapped for REDD+ and that market-based approaches can be developed based on accumulating experience. Further elaboration of financing needs of REDD+ is provided in Chapter 3 on needs and gaps.

A. UN-REDD Programme

41. There are many multilateral institutions and organizations whose programmes include REDD+ activities, like GEF and World Bank. The UN-REDD Programme is the United Nations Collaborative Initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD+) in developing countries. The Programme was launched in September 2008 to assist developing countries to build capacity to reduce emissions and participate in a future REDD+ mechanism. Through its partnership with 42 countries in Africa, Asia-Pacific and Latin America and the Caribbean (and related global activities), the UN-REDD Programme is supporting

¹⁰³ UNFCCC, “Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010” (2011), para. 71.

¹⁰⁴ FAO, “State of the World’s Forests 2011” (2011), p. 58.

¹⁰⁵ Ibid., p. 61.

¹⁰⁶ UNFCCC, “Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010” (2011)- decision 1/CP.16, para. 77.

governments to prepare national REDD+ strategies, build monitoring systems, engage stakeholders and assess multiple benefits.

42. The Programme has identified six interlinked work areas as priorities to support the national readiness process and the development and implementation of national REDD+ strategies: (1) Measurement, Reporting and Verification (MRV) and Monitoring; (2) National REDD+ Governance; (3) Engagement of Indigenous Peoples, Local Communities and Other Relevant Stakeholders; (4) Ensuring Multiple Benefits of Forests and REDD+; (5) Transparent, Equitable and Accountable Management of REDD+ Payments; and (6) REDD+ as a Catalyst for Transformations to a Green Economy.

43. By June 2011, the UN-REDD Programme had 42 partner countries (Table 2.2). Thirteen of these have had their funding requests to support their National Programmes approved by the Policy Board. Of these, the UN-REDD Programme disbursed funding to nine countries, which are currently in the implementation phase.¹⁰⁷

Table 2.2 List of UN-REDD Programme Partner Countries

Africa	Asia-Pacific	Latin America and the Caribbean
Benin	Bangladesh	Argentina
Cameroon	Bhutan	Bolivia*
Central African Republic	Cambodia*	Chile
Côte d'Ivoire	Indonesia*	Colombia
Democratic Republic of the Congo*	Mongolia	Costa Rica
Ethiopia	Myanmar	Ecuador*
Gabon	Nepal	Guatemala
Ghana	Pakistan	Guyana
Kenya	Papua New Guinea*	Honduras
Nigeria*	Philippines*	Mexico
Republic of Congo*	Solomon Islands*	Panama*
South Sudan	Sri Lanka*	Paraguay*
Sudan	Viet Nam*	Peru
Tanzania*		Suriname
Zambia*		

* Countries receiving support from National Programmes

Source: UN-REDD Programme (2012), <http://www.un-redd.org/UNREDDProgramme/CountryActions/tabid/584/language/en-US/Default.aspx>.

44. As of 30 June 2011, total deposits into the UN-REDD Programme fund were almost USD 97 million (see Table 2.3). Almost 90% of the deposits were made by Norway.

¹⁰⁷ UN-REDD Programme, UN-REDD Programme Semi-Annual Update (January-June 2011).

Table 2.3 Total Donor Deposits into the UN-REDD Programme Fund

Donor	USD 1,000				Total	Share
	2008	2009	2010	2011		
Norway	12,000	40,214	32,193	21,411	105,818	89%
Denmark	--	1,917	6,160	--	8,077	7%
Japan	--	--	--	3,046	3,046	3%
Spain	--	--	1,315	--	1,315	1%
TOTAL	12,000	42,131	39,668	24,457	118,256	100%

Source: UN-REDD Programme (2012), UN REDD Programme Fund Funding Framework, UN-REDD Programme Eighth Policy Board Meeting 25-26 March 2012, Asunción, Paraguay.

45. The UN-REDD Programme works in close coordination with the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Program (FIP) (part of the Climate Investment Funds) both at the international and national levels, where joint missions and information sharing result in coordinated support interventions. The Programme also works with the Secretariats of UNFCCC, GEF, UNFF and other members of the Collaborative Partnership on Forests (CPF), donors, civil society, non-governmental organizations and academia.¹⁰⁸

B. REDD+ Partnership

46. The REDD+ Partnership, launched in May 2010, serves as an interim platform for its partner countries to scale up actions and finance for initiatives to reduce emissions from deforestation and forest degradation (REDD) in developing countries. The objective of the Partnership is “to contribute to the global battle against climate change by serving as an interim platform for the Partners to scale up REDD+ actions and finance, and to that end to take immediate action, including improving the effectiveness, efficiency, transparency and coordination of REDD+ initiatives and financial instruments, to facilitate among other things knowledge transfer, capacity enhancement, mitigation actions and technology development and transfer.”¹⁰⁹

47. Around USD 4 billion were pledged for the period 2010–2012 for measures to reduce greenhouse gas emissions from deforestation and forest degradation in developing countries.¹¹⁰ At least about 50 tropical and sub-tropical forest countries are involved or expecting to become involved in REDD+. The total amount from multilateral, international and regional programmes currently estimated to be available for REDD+ is about USD 6.2 billion, as shown in Table 2.4. Around half of the total value was financed by Norway. Japan also contributed significantly to financing (25%).

¹⁰⁸ UN-REDD Programme, The UN-REDD Programme Strategy 2011-2015 (2010). For further information also see: <http://mdtf.undp.org/factsheet/fund/CCF00>.

¹⁰⁹ REDD+ Partnership, Work Program for the REDD+ Partnership Components and Timeline 2011-2012 (2012). <http://reddpluspartnership.org/73939/en/>.

¹¹⁰ REDD+ Partnership, Component 2: Analysis of Financing Gaps and Overlaps (2010).

Table 2.4 Financing of Multilateral, International, Regional and Bilateral Country Programmes for REDD+ from 2008

Country	USD million			Share
	Multilateral	Bilateral	Total	
Norway	540	2,327	2,866	46.40%
Japan	70	1,456	1,526	24.70%
France	42	269	311	5.00%
Germany	59	220	280	4.50%
European Commission	92	134	226	3.70%
United States	126	86	212	3.40%
United Kingdom	165	29	194	3.10%
Australia	36	67	103	1.70%
Finland	43	56	99	1.60%
Sweden	39	34	74	1.20%
Denmark	52	17	70	1.10%
Switzerland	37	23	60	1.00%
Others	5	45	50	0.80%
Canada	40	-	40	0.60%
Spain	38	-	38	0.60%
Netherlands	20	-	20	0.30%
Belgium	10	-	10	0.20%
TOTAL	1,414	4,765	6,179	100.00%

Source: Ivan Tomaselli, Forest Financing: Latin America and the Caribbean Region (2012).

C. The International Tropical Timber Organization's REDDES Programme

48. The International Tropical Timber Agreement (ITTA) in 2006 opened up an opportunity for ITTO to initiate the Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES). The objective of the REDDES programme is to strengthen the capacity of ITTO developing member countries and their stakeholders to (1) reduce unplanned deforestation, (2) reduce forest degradation, (3) maintain and enhance climate mitigation and other environmental services of tropical forests, (4) contribute to the social and economic sustainability and wellbeing of forest-dependent communities and (5) enhance adaptation and resilience of tropical forests to negative effects of climate change and human-induced impacts. The main value added by the REDDES programme derives from its complementarities with other international initiatives related to REDD+, as it can address many of the thematic or geographic gaps with its integrated framework. It also provides a possibility to integrate, in a consistent and systematic manner, all environmental services (including carbon and non-carbon environmental services) within the SFM framework for management of tropical forests focusing on capacity building for implementation.

49. The indicative total budget for the REDDES programme for the period of 2009-2012 was USD 18 million. As of December 2011, pledges received under the REDDES programme were

USD 9.2 million, or 51.3% of the total. Donors to the REDDES programme are Norway, Japan, Switzerland and USA. 16 countries have received support in implementing 24 projects totaling USD 8.1 million.

2.2.5 Carbon Finance at the World Bank

50. The World Bank Carbon Finance Unit's (CFU) initiatives are part of the larger global effort to combat climate change, and go hand in hand with the World Bank's mission to reduce poverty and improve living standards in the developing world. The CFU uses money contributed by governments and companies in OECD countries to purchase project-based greenhouse gas emission reductions in developing countries and countries with economies in transition. The emission reductions are purchased through one of the CFU's carbon funds on behalf of the contributor, within the framework of the Kyoto Protocol's CDM or Joint Implementation (JI) initiatives.

51. Unlike other World Bank development products, the CFU does not lend or grant resources to projects but rather contracts to purchase emissions reductions similar to a commercial transaction, paying for them annually or periodically once they have been verified by a third party auditor. The selling of emission reductions – or carbon finance – has been shown to increase the bankability of projects by adding an additional revenue stream in hard currency, which reduces the risks faced by commercial lending or grant finance. Thus, carbon finance provides a means of leveraging new private and public investment in projects that reduce greenhouse gas emissions, thereby mitigating climate change while contributing to sustainable development.

52. The Bank's carbon finance operations have demonstrated numerous opportunities for collaboration across sectors, and have served as a catalyst in bringing climate issues to bear on projects relating to rural electrification, renewable energy, energy efficiency, urban infrastructure, waste management, pollution abatement and water resource management as well as in forestry.

53. With respect to forest carbon finance, a number of specialized funds managed by the Bank provide resources to meet wider objectives within the framework of the CDM or JI.

54. The World Bank has mobilized a fund to demonstrate projects that sequester or conserve carbon in forest and agro-ecosystems. The BioCarbon Fund, a public/private initiative administered by the World Bank, aims to deliver cost-effective emissions reductions, while promoting biodiversity conservation and poverty alleviation. The Fund is composed of two Tranches: Tranche One started operations in May 2004 and has a total capital of USD 53.8 million; Tranche Two was operationalized in March 2007 and has total capital of USD 36.6 million. Both Tranches are closed to new fund participation.

55. The BioCarbon Fund can consider purchasing carbon from a variety of land use and forestry projects. The portfolio of supported activities includes Afforestation and Reforestation, Reducing Emissions from Deforestation and Degradation, and possibly innovative approaches to agricultural carbon.

56. The Forest Carbon Partnership Facility (FCPF),¹¹¹ which became operational in June 2008, is a global partnership focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+). The FCPF complements the UNFCCC negotiations on REDD+ by demonstrating how REDD+ can be applied at the country level and by learning lessons from this early implementation phase.

57. The FCPF has created a framework and processes for REDD+ readiness, which helps countries prepare for future systems of financial incentives for REDD+. Using this framework, each participating country develops an understanding of what it means to become ready for REDD+, in particular by developing reference scenarios, adopting a REDD+ strategy, designing monitoring systems and setting up REDD+ national management arrangements, in ways that are inclusive of the key national stakeholders.

58. Thirty-seven forest developing countries (fourteen in Africa, fifteen in Latin America and the Caribbean and eight in Asia-Pacific) have so far been selected by the partnership. The FCPF relies on an effective and inclusive governance structure, with the Participants Assembly and the Participants Committee at its core. The Participants Assembly, which is comprised of all the countries and organizations participating in the FCPF, meets annually and elects the Participants Committee. The Participants Committee is made up of an equal number of forest (REDD+) countries and financial contributors (14 each), and is also comprised of observers representing indigenous peoples, civil society, international organizations, the UN-REDD Programme, the UNFCCC Secretariat and the private sector. The Committee, which usually meets three times a year, is the main decision-making body of the FCPF. It reviews country submissions, decides on grant resource allocation and approves budgets.

59. The World Bank assumes the functions of trustee, secretariat and Delivery Partner. The Inter-American Development Bank and United Nations Development Programme are in the process of becoming Delivery Partners under the Readiness Fund.

60. With assistance from the Readiness Fund (currently about USD 230 million committed or pledged by 15 public donors, each having provided at least USD 5 million), each participating country prepares itself for REDD+ by developing the necessary policies and systems, in particular by adopting national strategies; developing reference emission levels; designing measurement, reporting and verification (MRV) systems; and setting up REDD+ national management arrangements, including the proper safeguards.

61. The focus of the FCPF to date has been on REDD+ readiness. A total of 26 countries have already prepared their Readiness Preparation Proposals, of which 19 have been submitted for a formal assessment. Three have received grants for implementation.

62. In the readiness phase, significant cooperation has been developed between the FCPF and the UN-REDD Programme, the Forest Investment Program and the Global Environment Facility. In addition, a common approach to environmental and social safeguards has been developed,

¹¹¹ <http://www.forestcarbonpartnership.org/fcp/node/12>

which allows the proceeds of the FCPF Readiness Fund to flow through the various Delivery Partners.

63. The FCPF Carbon Fund, the second fund of the FCPF, has become operational. It will provide payments for verified emission reductions from REDD+ programmes in countries that have made considerable progress towards REDD+ readiness. It is expected that up to five REDD+ Country Participants will qualify for the Carbon Fund based on a progress assessment by the FCPF Participants Committee.

64. Programmes submitted to the Carbon Fund (currently about USD 205 million committed or pledged by ten public and private contributors, each having provided at least USD 5 million) will have to meet the following criteria:

- i. Focus on results, namely high-quality and sustainable emissions reductions including social and environmental benefits;
- ii. Sufficient scale of implementation, e.g., at the level of an administrative jurisdiction within a country or at the national level;
- iii. Consistency with emerging compliance standards under the UNFCCC and other regimes;
- iv. Diversity, so as to generate learning value for the FCPF and other Participants;
- v. Clear mechanisms so that the incentives for REDD+ reach those who need them;
and
- vi. Transparent stakeholder consultations.

65. In addition, programmes implemented at the sub-national scale will need to be consistent with the emerging national strategies, reference emission levels and MRV systems, and be accompanied by measures to assess and minimize the risk of leakage.

66. The Carbon Fund is intended to play a catalytic role for REDD+, building on the experience of pioneering initiatives such as the BioCarbon Fund. Accordingly, Carbon Fund commitments should be made early enough to provide incentives to countries to adopt the necessary policies and systems and undertake the necessary investments. Consistent with the UNFCCC decision on REDD+ adopted in Cancun in December 2010, the readiness, investment and performance-based payment phases are not purely sequential but will instead overlap to a large extent.

67. Nevertheless, to ensure that carbon finance builds on readiness achievements, the FCPF Participants Committee must have assessed a country's Readiness Package before the country can enter into an Emission Reductions Payment Agreement with the Carbon Fund. The Carbon Fund will deliver emissions reductions to the financial contributors to the Fund pro rata to the capital share.

*2.2.6 The Climate Investment Funds*¹¹²

68. The Climate Investment Funds (CIF) are a group of funds which have been mobilized by a group of bilateral agencies to enable a group of multilateral development banks (MDBs) to support effective and flexible implementation of country-led programmes and investments aimed at climate mitigation or strengthened resilience to climate change. The funds are designed to complement existing bilateral and multilateral financial mechanisms and, as such, their operations are coordinated with the programmes of other financial institutions. To ensure this, an important feature of the CIF's programming is MDB engagement, under the leadership of the country with the United Nations Agencies and bilateral development and investment agencies, with a view to mobilizing co-financing and harmonizing policy support.

69. CIFs are designed as an interim measure for the MDBs to demonstrate what can be achieved through scaled-up financing blended with development finance. Reflecting on this interim nature, CIF funds include specific sunset clauses linked to agreement on the future of the climate change regime.

70. As sustainable economic growth and poverty reduction is the core mission of the MDBs, it is important that climate change mitigation and adaptation considerations be integrated into the sustainable development process.

71. The Strategic Climate Fund (SCF) is one of the two funds of the Climate Investment Funds. It serves as an overarching framework to support three targeted programmes with dedicated funding to pilot new approaches with potential for scaled-up, transformational action aimed at a specific climate change challenge or sectoral response. One of the three targeted programmes under the SCF is the Forest Investment Program (FIP).¹¹³

72. The FIP was approved in May 2009. The FIP has been subscribed with funds totaling more than USD 600 million. It aims to support developing countries' efforts to reduce deforestation and forest degradation and to promote sustainable forest management that leads to emissions reductions and the protection of carbon reservoirs. It achieves this by providing scaled-up financing to developing countries for readiness reforms and public and private investments, identified through national REDD+ readiness or equivalent strategies. The FIP Steering Committee has approved the preparation of a series of country pilot initiatives in the following countries: Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Lao People's Democratic Republic, Mexico and Peru.

73. The FIP takes into account country-led priorities and strategies for the containment of REDD+, while building on existing forest or related initiatives. It promotes programmatic

¹¹² <http://www.climateinvestmentfunds.org/cif/MDB-Role>

¹¹³ The other two targeted programs of the SCF are the Pilot Program for Climate Resilience (PPCR), approved in November 2008, and the Program for Scaling-Up Renewable Energy in Low Income Countries (SREP), approved in May 2009. The object of the PPCR is to pilot and demonstrate ways to integrate climate risk and resilience into core development planning, while complementing other ongoing activities. SREP is aimed at demonstrating the social, economic, and environmental viability of low carbon development pathways in the energy sector. It seeks to create new economic opportunities and increase energy access through the production and use of renewable energy.

investments aimed at transformational change in the forest sector or sectors affecting forests. The FIP will support:

- i. Investments that build institutional capacity, forest governance and information;
- ii. Investments in forest mitigation efforts, including forest ecosystem services; and
- iii. Investments outside the forest sector necessary to reduce the pressure on forests such as alternative livelihood and poverty reduction opportunities.

74. FIP investments also mainstream climate resilience considerations and contribute to multiple co-benefits such as biodiversity conservation, protection of the rights of indigenous peoples and local communities, and poverty reduction through rural livelihoods enhancements.

2.2.7 Green Climate Fund

75. The Green Climate Fund (GCF) was launched at the 17th Conference of the Parties to the UNFCCC in Durban, in November 2011. The GCF is the operating entity of the financial mechanism of the UNFCCC, with arrangements to be concluded in the UNFCCC COP 18 (Qatar, December 2012).

76. The general purpose of the Fund is to make a contribution to combat climate change. In the context of sustainable development, the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change. In the broad context of long-term financial support, industrialized countries committed to provide funds of USD 100 billion per year by 2020 to support concrete mitigation actions by developing countries. These funds would be raised from a mix of public and private sources.¹¹⁴

2.2.8 Voluntary Carbon Markets

77. Forest-based carbon markets and trading have aroused a tremendous amount of interest within the forest sector. Forest and climate financing activities intersect in both areas of mitigation and adaptation.¹¹⁵ The global carbon market is valued at USD140 billion annually. Forest carbon markets collectively raised USD 178 million in 2010,¹¹⁶ and could generate USD 7 billion in 2020.¹¹⁷ Carbon markets and trading schemes are still relatively new, however, and there is broad optimism regarding the potential for carbon trading schemes to provide a new revenue source for forest landowners and rights-holders and employment opportunities for those involved in carbon market related projects. At this point, considering that the carbon market is in its infancy, prices for carbon have fluctuated dramatically and the marketplace for carbon is not

¹¹⁴ UNFCCC, First steps to a safer future: Introducing the United Nations Framework Convention on Climate Change (2012).

¹¹⁵ Buchner et al., *The Landscape of Climate Finance*, Climate Policy Initiative, Venice (2011), p. 42.

¹¹⁶ Diaz et al., *State of the Forest Carbon Markets 2011* (2011), p. 7.

¹¹⁷ Eliasch Review, *Climate Change: Financing Global Forests* (2008), p. 166.

quite established. Nevertheless, there have been indications that, should these markets become more firmly established with financial benefits flowing in a dependable way to producers, financial institutions may be willing to accept carbon payments as loan collateral.

78. REDD+-related initiatives are credited with much of the voluntary carbon market growth in 2009 and 2010, with the private sector taking on roles as not only investors and project developers but also as buyers and intermediaries, indicating a growing confidence in the future of carbon-related investments.¹¹⁸ However, it is acknowledged that there is a need for governments to support capacity building to strengthening policies and contracts.¹¹⁹ It is estimated that the value of the voluntary carbon market was at least USD 424 million in 2010, with REDD+ projects comprising USD 76 million in forward sales.¹²⁰

79. The majority of suppliers in voluntary carbon markets are from the private sector, followed by non-profit organizations and the public sector. Non-profit organizations focus almost exclusively on forest carbon projects with 85%, followed by the public sector at 67% and the private sector at 34%.¹²¹

80. The majority of over-the-counter (OTC)¹²² suppliers in 2010 were found in North America, specifically Canada for forestry projects.¹²³ However, the majority of forest-related projects were found in Latin America, comprising 81% of all REDD+ credits and half of all transacted forestry credits.¹²⁴ Africa experienced a tripling of investments in 2010, primarily in sustainable development and forests, totaling USD 25.7 million, two-thirds of which were REDD+ projects, agro-forestry and Improved Forest Management (IFM).¹²⁵

81. The OTC projects that fall within the purview of forests are: (1) REDD+/Avoided Conversion, (2) Afforestation/Reforestation, (3) Improved Forest Management and (4) Forestry. In 2010 REDD+ comprised 29% of OTC transactions, followed by Afforestation/Reforestation at 6%, Improved Forest Management at 5% and Forestry at 2%, totaling 42% of global OTC transactions, double the amount from 2009.¹²⁶

2.2.9 Forest-backed Bonds

82. Forest-backed bonds are an emerging instrument intended to be used as a tool for financing forest preservation, following the model of public-private partnership for large-scale investments in critical services (such as energy and transportation infrastructure).¹²⁷ In theory,

¹¹⁸ Diaz et al., *State of the Forest Carbon Markets 2011* (2011), pp. 12-13.

¹¹⁹ Ibid., p. 13.

¹²⁰ Molly Peters-Stanley et al., *State of the Voluntary Carbon Markets 2011* (2011), pp. iv, 16.

¹²¹ Ibid., p. 14.

¹²² Note: The voluntary OTC offset market includes all voluntary sales and purchases of carbon credits outside the Chicago Climate Exchange.

¹²³ Molly Peters-Stanley et al., *State of the Voluntary Carbon Markets 2011* (2011), p. 23.

¹²⁴ Ibid.

¹²⁵ Ibid., p. 25.

¹²⁶ Ibid., p. 15.

¹²⁷ M. Cranford et al., *Unlocking Forest Bonds: A High Level Workshop on Innovative Finance for Tropical Forests*, Workshop Report (2011), p. 5.

“forest bonds should not rely solely on forest carbon revenue and could potentially be linked to income from other ecosystem service markets (e.g. water, biodiversity), sustainable timber and agricultural markets, regulation (e.g. taxes, liability regulation), and forest-friendly lending (e.g. to ecosystem-dependent small- and medium-sized enterprises).”¹²⁸

83. In 2010, forests represented but a small portion of the USD 3.5 billion of green bonds issued, included for their value in climate change mitigation and adaptation activities.¹²⁹ Intended as a mechanism to generate large-scale demand for forest carbon, with the potential to create a meaningful price signal for investors, forest-backed bonds are discussed as a complementary approach to REDD+, characterized also by the potential to fill the short to medium-term finance gap REDD+ currently faces due to the time lag between planning and execution stages.¹³⁰ Initiatives such as the Emergency Package of the Prince’s Rainforest Project were created to act as bridges to a long-term UNFCCC solution.¹³¹

84. The Prince’s Rainforest Project has worked to develop country financing from public and private sources through specialist bonds, with hopes that the development of a global ‘Rainforest Bond’ will be able to tap into the USD 400 billion of Sovereign, Supranational and Agency Bonds.¹³² The Project has brought together actors within pension funds and the insurance sector, who indicate a potentially significant demand for bonds to be guaranteed by developed-country governments.¹³³

2.2.10 Regional and National Initiatives/Mechanisms for Forest Climate Financing

85. There are a number of regional and national initiatives/mechanisms whose main focuses are on climate change, access to REDD+ funding and carbon markets. In particular, since the early 2000s regional development banks (RDBs) such as the African Development Bank (AfDB), the Asian Development Bank (ADB) and the Inter-American Development Bank (IADB), have significantly increased their funding for forest-related projects and activities.

86. The AfDB has a forestry portfolio now valued at USD 352 million.¹³⁴ The AfDB’s contribution to forestry rose from USD 35.8 million per year during the period 2000-2002 to USD 72.7 million per year during the period 2005-2007. The emergence of the AfDB as a major player in financing forest projects related to environmental services (particularly biodiversity and climate change) is underlined by the increased allocation of funds through two recently established programmes: the Regional Public Goods Program (RPG), as well as the African Carbon Support Programme. Some 21 countries in Africa benefit from the AfDB’s forest sector portfolio. The AfDB also hosts the Congo Basin Forest Fund (CBFF), which supports the Central African Forests Commission (COMIFAC) countries to sustainably manage and preserve the Congo Basin ecosystems.

¹²⁸ Ibid., p. 6.

¹²⁹ Ibid., p. 10.

¹³⁰ Ibid., p. 8.

¹³¹ The Prince’s Rainforest Project, *The Approach* (2012). www.rainforestsos.org/emergency-package/the-approach/

¹³² The Prince’s Rainforest Project, *An Emergency Package for Tropical Forests* (2009).

¹³³ Ibid.

¹³⁴ Peter Gondo, *A Review of Forest Financing in Africa*, (2012).

87. Similarly the ADB forecasted an excess of USD 600 million to be channeled in collaboration with the GEF and the Climate Investment Funds (CIF) to projects that address adaptation and mitigation, including land management forest carbon sequestration.¹³⁵ A major focus has been in Southeast Asia, due to the greater risks and vulnerabilities to climate change this region faces, combined with its high forest cover and high rates of deforestation.¹³⁶

88. In 2007 the IADB established the Sustainable Energy and Climate Change Initiative Fund (SECCI). This Initiative is based on four strategic pillars: renewable energy and energy efficiency, sustainable bio-fuel, access to carbon markets and adaptation to climate change.¹³⁷ By the end of 2010, a total of USD 58.7 million was approved for projects, with some in collaboration with the Climate Investment Funds (CIF). However, the largest economies in LAC (Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela) account for 61% of all funds.¹³⁸

89. There are a number of national carbon funds such as the Danish Carbon Fund, the Italian Carbon Fund, the Netherlands Clean Development Mechanism Facility and the Spanish Carbon Fund. However the projects do not currently directly relate to forests, focusing instead on issues such as: low-carbon growth; the development of market-based instruments; sustainable development and the integration of low-income countries into the Kyoto Protocol's CDM.

90. Norway, Germany and Australia have also established funds to support forest activities. In 2008 Australia took action under the International Forest Carbon Initiative through several activities: (1) the Indonesia-Australia Forest Carbon Partnership with a commitment of AUS 100 million, designed to engage in a strategic policy dialogue on climate change, support the development of Indonesia's National Carbon Accounting System and implement incentive-based REDD+ demonstration activities; (2) the Papua New Guinea-Australia Forest Carbon Partnership, with commitments of up to AUS 3 million in initial funding to support technical, scientific and analytical support for governmental policy development on REDD+;¹³⁹ and (3) contributions to the FCPF, FIP and REDD+ Partnership totaling an excess of AUS 60 million.¹⁴⁰

91. Norway is currently the largest source of funding to REDD+ through her International Climate and Forest Initiative (NICFI).¹⁴¹ Through NICFI, Norway is financing and actively participating in the FCPF, the UN REDD-programme, the FIP and the CBFF to prepare countries for future large-scale REDD+ payments. In addition, Norway has entered into large-scale bilateral REDD+ partnerships with Brazil, Indonesia, Guyana, Ethiopia, Tanzania and Mexico.

¹³⁵ Asian Development Bank, Focused Action: Priorities for Addressing Climate Change in Asia and the Pacific (2010), p. 8.

¹³⁶ Asian Development Bank, National REDD+ Strategies in Asia and the Pacific, (2010), pp. 6, 14.

¹³⁷ Ivan Tomaselli, Forest Financing: Latin America and Caribbean Region (2012).

¹³⁸ Ibid.

¹³⁹ The Australian Government Department of Agriculture, Fisheries and Forestry, <http://www.daff.gov.au/forestry/international/regional>

¹⁴⁰ The Australian Government Department of Climate Change and Energy Efficiency, <http://www.climatechange.gov.au/government/initiatives/international-forest-carbon-initiative/action.aspx>

¹⁴¹ The Government of Norway (n.d.), International Climate and Forest Initiative (NICFI). <http://www.regjeringen.no/en/dep/md/Selected-topics/climate/the-government-of-norways-international.html?id=548491>

For the most part, these partnerships aim for results in the form of verified emission reductions, and in early phases for agreed milestones towards REDD+ readiness.¹⁴²

92. Likewise the German Federal Government decided in October 2011 to establish an innovative Forest-Climate-Fund. This fund will be filled by income shares from the sale of emission certificates and will finance activities in the field of forest adaptation and mitigation, improvement of carbon sequestration in harvested wood products and research. Synergies between promotion of forest biological diversity and mitigation and adaptation activities will be sought for. The new fund will be operational beginning in 2013.¹⁴³

93. In addition to the aforementioned initiatives, Japan has a bilateral offset credit mechanism with seven feasibility studies on REDD+ related projects.¹⁴⁴ The Governor's Climate and Forests Task Force has developed multi-jurisdictional cooperative projects among the United States, Brazil, Indonesia, Mexico, Nigeria and Peru.¹⁴⁵ There are also forest carbon projects in Mexico, Brazil and Indonesia.¹⁴⁶ This initiative is now in the process of expanding to include a number of European countries that are interested in supporting the creation of partnerships to achieve forest protection, sustainable forest management and rural development in the context of REDD+ in developing countries.

2.3 Forest-related Financing and the Convention to Combat Desertification

94. Established in 1994, the UNCCD is the sole legally binding international agreement linking environment and development to sustainable land management. The Convention, to which 195 countries are parties, addresses specifically the arid, semi-arid and dry sub-humid areas, better known as the drylands, where some of the most vulnerable ecosystems and peoples can be found.

95. In the ten-year Strategy of the UNCCD (2008-2018) that was adopted in 2007, Parties to the Convention further specified the aim for the future... “to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability.”

96. The 10-year strategic plan and framework (2008–2018) to enhance the implementation of the Convention (The Strategy), or decision 3/COP.8, contains four strategic objectives: to improve the living conditions of affected populations, to improve the condition of affected ecosystems, to generate global benefits through effective implementation of the UNCCD, and to mobilize resources to support implementation of the Convention by building effective partnerships between national and international actors.

97. Among five short-term operational objectives of the Strategy, the fifth objective is entitled “Financing and technology transfer” and aims “to mobilize and improve the targeting

¹⁴² For a full list of activities and relevant links, see also <http://reddplusdatabase.org/entities/288>

¹⁴³ Matthias Schwoerer, UNFF National Focal Point for Germany, 8 March 2012.

¹⁴⁴ Please refer to <http://www.mmechanisms.org/e/redd/ct-japan.html>

¹⁴⁵ For more information please see: The Governors' Climate and Forests Task Force, www.gcftaskforce.org

¹⁴⁶ For more information, please see <http://www.forestcarbonportal.com/projects>

and coordination of national, bilateral and multilateral financial and technological resources in order to increase their impact and effectiveness”.¹⁴⁷ Furthermore, it outlines five specific outcomes Country Parties have agreed upon to increase finance for CCD implementation:

- i. Outcome 1: Affected country Parties develop integrated investment frameworks for leveraging national, bilateral and multilateral resources with a view to increasing the effectiveness and impact of interventions.
- ii. Outcome 2: Developed country Parties provide substantial, adequate, timely and predictable financial resources to support domestic initiatives to reverse and prevent desertification/land degradation and mitigate the effects of drought.
- iii. Outcome 3: Parties increase their efforts to mobilize financial resources from international financial institutions, facilities and funds, including the GEF, by promoting the UNCCD/Sustainable land management (SLM) agenda within the governing bodies of these institutions.
- iv. Outcome 4: Innovative sources of finance and financing mechanisms are identified to combat desertification/land degradation and mitigate the effects of drought, including from the private sector, market-based mechanisms, trade, foundations and civil society organizations (CSOs), and other financing mechanisms for climate change adaptation and mitigation, biodiversity conservation and sustainable use and for hunger and poverty reduction.
- v. Outcome 5: Access to technology by affected country Parties is facilitated through adequate financing, effective economic and policy incentives and technical support, notably within the frameworks of South-South and North-South cooperation.

98. Decision 4/COP.8 is related to activities for the promotion and strengthening of relationships and synergies with other relevant conventions and relevant international organizations, institutions and agencies and is to a great extent related to DLDD and sustainable forest management. Main aspects related to SFM mentioned in the decision are to: (1) Reinforce SFM as a means of preventing soil erosion and flooding, thus increasing the size of atmospheric carbon sinks and conserving ecosystems and biodiversity; (2) Strengthen SFM and integrated water management to maintain ecosystem services in affected areas, prevent soil erosion and flooding, increase the size of atmospheric carbon sinks and conserve and sustainably use biodiversity; and (3) Strengthen the capacity of LFCCs to combat desertification, land degradation and deforestation.

99. Other decisions of UNCCD COPs related to forests are: 8/COP.4, 2/COP.6 and 12/COP.7.¹⁴⁸ With regard to finance the Convention acknowledges that: “*Recognizing further*

¹⁴⁷ UNCCD, The 10-year strategic plan and framework to enhance the implementation of the Convention (2008-2018), ICCD/COP, The Strategy, (8)/16/Add.1.

¹⁴⁸ The decisions taken by the Conference of the Parties are available at <http://www.unccd.int/en/about-the-convention/official-documents>.

the importance of the provision to affected developing countries, particularly in Africa, of effective means, inter alia substantial financial resources, including new and additional funding, and access to technology, without which it will be difficult for them to implement fully their commitments under this Convention.”¹⁴⁹

100. The analysis revealed that a considerable fraction of the investments into forests are made within a framework of combating land degradation and desertification specifically through sustainable land management. Those investments are attractive to national governments as they ensure sustainability of production systems that in turn benefit a large number of land users.

2.3.1 The Global Mechanism of the UNCCD

101. The Global Mechanism (GM) was established under Article 21 of the UNCCD by the First Conference of the Parties held in Rome in September 1997, and is a subsidiary body of the UNCCD. The GM is an innovative entity that tackles the problems surrounding natural resource degradation by supporting country Parties in mobilizing financial resources to address land, forest and natural resource degradation, rural development challenges and poverty.

102. The GM focuses on “improving aid effectiveness by strengthening countries’ development strategies and operational frameworks, aligning aid with country priorities and eliminating duplication,”¹⁵⁰ by encouraging a more coherent approach to resource mobilization and to development as a whole by country Parties and their partners. It also tries to foster enabling conditions for UNCCD country Parties by assisting in capacity building focused on mobilizing public, private and innovative finance and investment.

103. The GM’s approach to Convention implementation addresses the relevance of new financing modalities such as alignment with country priorities and harmonization of international support to development programming. Increased understanding of financial instruments such as payments for ecosystem services, microfinance, incentives, basket funds, direct budget support, sector-wide approaches (SWAs) and other programme-based approaches (PBA) is also relevant for other conventions and the implementation of global policy processes.

104. The GM operates at international, regional, sub-regional and national levels, as required. Below is a brief overview of how the GM works at each level.

105. At the international level, the GM is actively involved in strategic global initiatives, such as the Global Donor Platform for Rural Development, the Collaborative Partnership on Forests and others, organized in partnership with a range of multilateral and bilateral partners. Additionally, the GM works closely with the Convention on Biodiversity (CBD) and the Convention on Climate Change (UNFCCC), with the aim of generating synergies to support country-level implementation.

106. At regional and sub-regional levels, the GM strives to increase its impact through interventions aimed at fostering dialog and sharing experiences among stakeholders, with a view

¹⁴⁹ Stated in the preamble of the Convention, please see <http://www.unccd.int/en/about-the-convention>.

¹⁵⁰ The Paris Declaration on Aid Effectiveness (2005).

toward incorporating countries' experiences into the broader debate, furthering understanding of the GM's specific role and the importance of the UNCCD as a development convention, and positioning the UNCCD in the global context of development programming and macro-economic reform processes.

107. At the country level, the GM provides advisory services and capacity-building activities to interested countries. The process focuses on working with country Parties to strengthen UNCCD National Action Plans (NAP) and to integrate NAP into national sustainable development processes. Additionally, the process focuses on the development and implementation of integrated financing strategies (IFS) and Integrated Investment Framework strategies (IIF) to assist governments, the private sector, community-based organizations and donor agencies in effectively financing UNCCD implementation at the national level. The IFS and IIF processes examine domestic budget processes, the investment climate, potential finance instruments, sources of finance, and how they all complement one other. By so doing, IFS and IIF processes support country Parties in the context of domestic budget processes, international aid delivery and overarching development agendas such as poverty reduction strategies, to ascertain how best to engage stakeholders in mobilizing domestic and international resources.

2.3.2 GEF

108. The GEF is the largest provider of financing to developing countries and countries with economies in transition for projects related to combating land degradation (desertification and deforestation). Since its inception in 1991, the GEF has invested USD 438 million in 94 projects and programmes on sustainable land management to combat desertification and deforestation. Through these investments, the GEF has leveraged USD 2.8 billion in co-financing from multilateral and bilateral agencies, as well as from governments of beneficiary countries.¹⁵¹

109. The 4th GEF Assembly held on May 24-28, 2010 in Punta del Este, Uruguay, accepted recommendations of the GEF Council to declare the GEF as Financial Mechanism of the UNCCD. As a result, the GEF Assembly also agreed to amend the GEF instrument accordingly. The GEF as financial mechanism of the UNCCD directly contributes to the implementation of the Convention, including its ten-year (2008–2018) Strategic Plan and Framework adopted by COP-8.

110. GEF investment in SLM is now well established through a dedicated Land Degradation Focal Area, which became formally operational during the Fourth Replenishment Phase (2006-2010). Allocated resources to the Land Degradation Focal Area for GEF-5 (2010-2014), which primarily supports priorities of the UNCCD, increased more than 30% over the GEF-4 level and reached USD 405 million. With the new System for a Transparent Allocation of Resources during the Fifth Replenishment Phase, a total of USD 324 million out of the total USD 405 million has been allocated directly to 143 countries for investment in SLM. The country allocations took into consideration three important criteria for the Focal Area: (1) extent of drylands; (2) area affected by land degradation; and (3) population affected by land degradation.

¹⁵¹ GEF, Behind the Numbers – A closer look at GEF achievements (2010).

111. Due to needs and priorities of GEF-eligible countries, investments in sustainable land management (SLM) leverages resources from other GEF focal areas (Climate Change, Biodiversity and International Waters), and from the Least Developed Countries Fund (LDCF) and Special Climate Change fund (SCCF) that are dedicated specifically to financing climate change adaptation.

2.3.3 World Bank

112. The World Bank is a major funding institution of SLM through investments in the natural resource management sectors. In Sub-Sahara Africa, the Terrafrica Platform mobilized nearly USD 1.2 billion in investments for SLM through the World Bank and the GEF.¹⁵²

113. Based on OECD data, aid flows to agriculture primarily targeted Sub-Saharan Africa (31%) and South and Central Asia (22%). Least developed countries and other low-income countries received more than half of the total aid to agriculture. Another picture emerges from the World Bank study,¹⁵³ where 46% of the lending for SLM went to the East Asia and Pacific region, 31% to South Asia, 8% to the Middle East and North Africa, and only 5% each to three regions: Africa, Europe and Central Asia, and Latin America & the Caribbean. This distribution is likely due to the large World Bank lending operations for afforestation/reforestation in East Asia, mainly China and Vietnam.

2.3.4 Regional and Sub-regional Initiatives/Mechanisms

114. A number of regional and sub-regional initiatives and programmes have emerged around the world with the objective of mobilizing and channeling financing for SFM and SLM efficiently, comprehensively and in harmony with other partnership support provided at all levels. Such regional and sub-regional initiatives and programmes are an important source of funding for UNCCD implementation. Examples include the Comprehensive Africa Agriculture Development Programme and the West Africa Forest Finance Initiative and the Agronomic Tropical Center for Research and Teaching. The Sub-regional Economic Communities bring together individual countries so that the sub-regions may achieve greater and more strategic economic integration and improvement. Some examples of Sub-regional Economic Communities include the Economic Community of West African States and the Arab Maghreb Union.

2.4 Other New and Emerging Forest Financing Related Initiatives

115. In addition to numerous initiatives and mechanisms that have been established in the last couple of years and focus on the carbon content of forests, there are other initiatives that have a primary focus on other aspects of forest management and services. These initiatives address issues of governance, law enforcement, trade in forest products, and various methods for quantifying ecosystem services that are provided by forests. This section aims to review some of these major initiatives and their associated financing, with the view to having a broader understanding of the overall trend of financing flow to forests.

¹⁵² Currently the World Bank is reviewing a new portfolio for SLM, which will be completed in the coming months. No information is accessible about this portfolio at the time of preparation of this study.

¹⁵³ The World Bank, Sustainable Land Management: Challenges, Opportunities and Trade-offs (2006).

2.4.1 Forest Law Enforcement and Governance/Trade Initiatives

116. While not financing mechanisms, forest law enforcement and forest governance have remained two of the most debated issues in international forestry for many years. Due to the importance of Forest Law Enforcement and Governance/Trade (FLEG/T), various international and regional organizations and countries are involved in different programmes and initiatives aiming at improving FLEG/T at all levels. These multilateral initiatives can support flows for sustainable forest finance. Some examples of such initiatives follow.

A. International Tropical Timber Organization (ITTO)

117. The International Tropical Timber Agreement (ITTA), negotiated in 2006, includes commitments to strengthen the capacity of members to improve forest law enforcement and governance and address related trade in tropical timber. In 2007 the Council approved a pilot of the thematic programme on forest law enforcement, governance and trade (TFLET). The general objective of the thematic programme is to improve national forest law enforcement and governance in tropical ITTO member countries in order to enhance and diversify international trade in tropical timber from sustainably managed forests and to help alleviate poverty in those countries.

Box 2.1 The International Tropical Timber Organization (ITTO)

The ITTO financed two pilot projects to develop systems for standardizing and replication to contribute towards enhancing SFM in Papua New Guinea. These projects are:

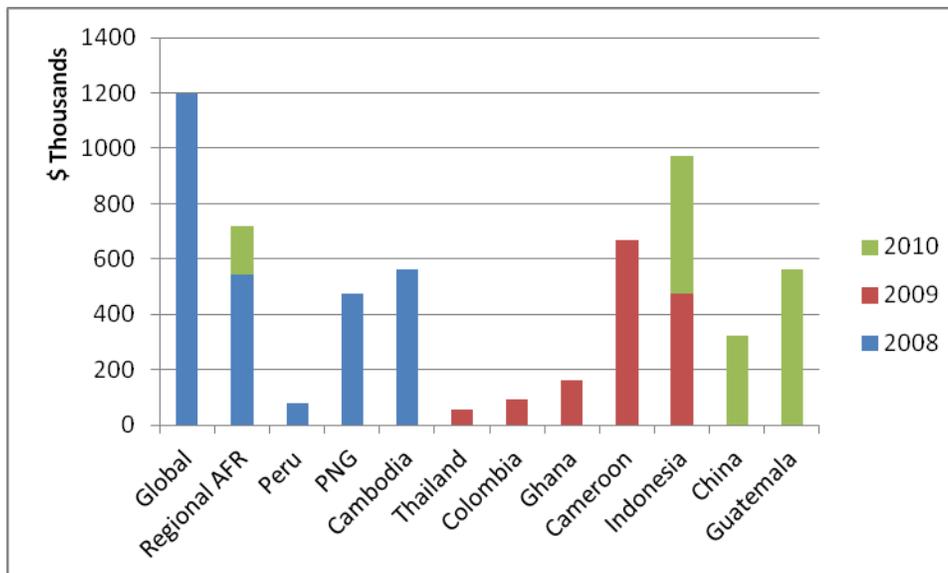
1. Forests Law Enforcement & Governance, a two-year long project (2010-2011) intended to develop systems on timber legality and traceability and verification in PNG, to be standardized to assist in the monitoring of logging operations.
2. The Trialling of High Valued Tree species in Savannah grassland areas of Central province, a three-year project that commenced in February 2012, involving customary landowners. Upon successful completion, the systems and tools will be applied in other areas of PNG.

Source: Dambis Kaip, UNFF Focal Point for Papua New Guinea, 14 February 2012.

118. The total budget envisaged for ITTO's TFLET programme for the period 2009-2012 was USD 15 million. The governments of the Netherlands, Japan, Switzerland, USA, Australia, New Zealand, Finland, Norway and Korea have already pledged contributions to the thematic programme pilot phase totaling USD 4.8 million. As of December 2011 pledges received under TFLET were USD 6.7 million or 44.7% of the programme total. TFLET donors include the Netherlands, Japan, United Kingdom, USA, Switzerland, Germany, Australia, New Zealand, Finland, Norway, Republic of Korea and the Japan Lumber Importers Association. Ten countries

have received support totaling USD 3.9 million together with global and African regional projects totaling USD 1.9 million.

Figure 2.2 ITTO TFLET Programme Recipients¹⁵⁴



Adapted from: ITTO, www.itto.int/files/user/thematic/TFLET_Table_and_Summaries_101209.pdf

B. World Bank Forest Law Enforcement and Governance (FLEG) Program

126. In 2004, the European Commission and the World Bank launched collaboration in supporting Forest Law Enforcement and Governance Program (“the FLEG Program”) in East Asia-Pacific, Africa and Latin America and Caribbean regions. The objective was to contribute to the reduction of illegal harvesting, processing and trade of timber and timber products, and to improve forest sector governance.

127. The Program was much focused to support the regional FLEG processes that led to three Ministerial FLEG processes: East Asia (2001), Africa (2003) and Europe and North Asia (2005). All these initiatives produced Ministerial Declaration of political commitment to implement actions to control illegal logging and associated trade. Towards its end FLEG program moved more towards supporting country-level and sub-regional work to promote improved forest governance and law enforcement. These activities implemented the regional ministerial declarations and action plans.

128. After the closing of FLEG trust fund in 2010, forest law enforcement and governance activities have become part of the Program on Forests (PROFOR).¹⁵⁵ PROFOR supports knowledge generation and innovative practices in four areas: forest-based livelihoods, cross-

¹⁵⁴ Adapted from: ITTO, www.itto.int/files/user/thematic/TFLET_Table_and_Summaries_101209.pdf

¹⁵⁵ PROFOR is a multi-donor trust fund managed by the World Bank. The donors are the EU and governments of Finland, Germany, Italy, Japan, the Netherlands, Switzerland and the United Kingdom, and the World Bank. PROFOR activities are mostly executed by the World Bank.

sectoral impacts, financing sustainable forest management and governance. In 2011 PROFOR commitments and disbursements in governance were USD 2.2 million, about one third of PROFOR’s overall portfolio.

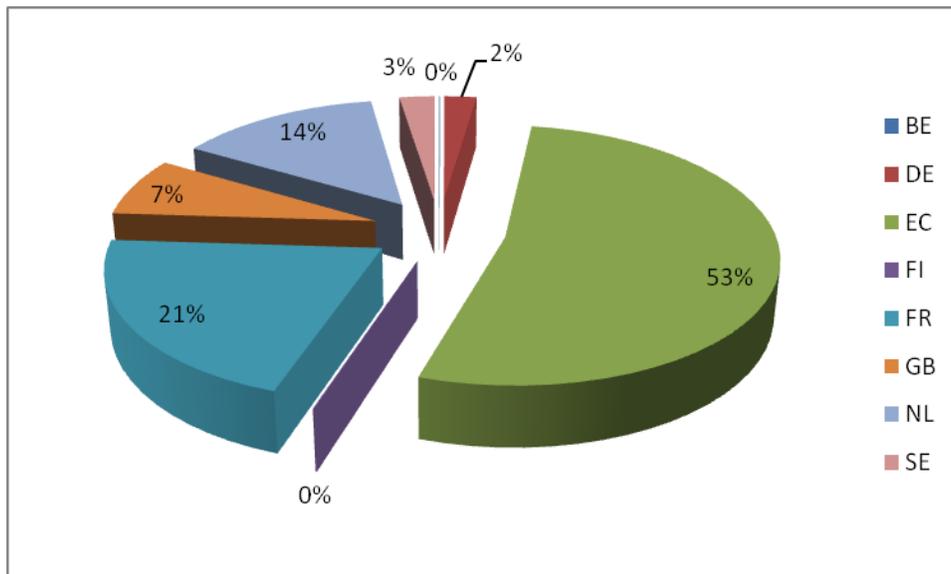
129. Additionally, the World Bank has supported forest governance work through several other trust funds, global programmes and investment operations. A 2006 assessment of World Bank forest lending portfolio estimated that forest law enforcement and governance activities accounts for 11 percent of total project costs across the portfolio. Preliminary findings from a 2012 update indicate that the relative share of FLEG activities has declined to some extent.

C. Regional FLEG Programmes

130. The EU FLEGT Facility is a multi-donor partnership whose overall objective is to support the EU Forest Law Enforcement Governance and Trade (FLEGT) process in developing countries related to the implementation of the EU FLEGT Action Plan. The overall goal of the EU FLEGT Action Plan is to promote good governance in the forest sector and to reduce deforestation by ensuring that European companies buy timber only from producer countries that comply with the ecological, social and economic requirements stipulated in their own forest laws. A key element is the development of bilateral agreements known as voluntary partnership agreements (VPA) between the EU and countries that export tropical timber to its member states

131. Funding for the EU-FLEGT Facility process has totaled more than USD 900 million during the period from 2002 to 2010. Major donors have been the EC with USD 470 million, France with USD 186 million and the Netherlands with USD 126 million.

Figure 2.3 EU-FLEGT Funders 2001-2010

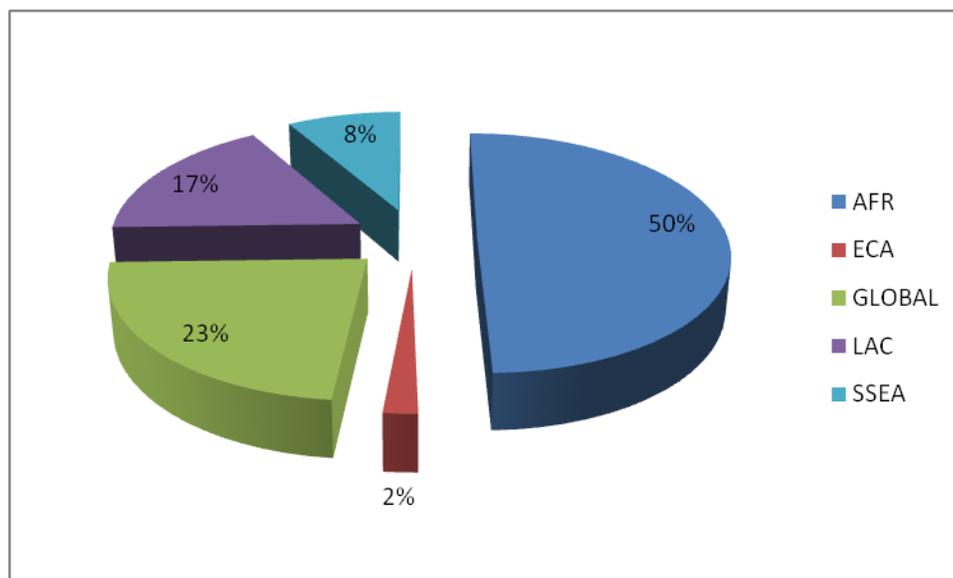


Source: European Forestry Institute, FLEGT Action Plan Progress Report, EU FLEGT Facility European Forest Institute (2011).

132. Key progress has been the signing of four Voluntary Partnership Agreements (Ghana, 2008; Republic of Congo, 2009; Cameroon, 2010; and Central African Republic, 2011); initiation of formal VPA negotiations with six countries (Democratic Republic of Congo, Gabon, Indonesia, Liberia, Malaysia and Vietnam); preliminary work with three countries as a precursor to formal VPA negotiations (Côte d'Ivoire, Guyana and Thailand); and information activities in various partner countries in the Asia-Pacific region, Central and South America and Africa, as well as in a number of regional and international meetings.

133. Publicly available data show that over 44 countries have benefited from EU-FLEGT resources. Africa accounts for 50% of all EU-FLEGT funds; within Africa the Congo Basin Countries account for approximately half and countries in West Africa account for one-third of the continent's total. Within Latin America and the Caribbean, Brazil has been a significant recipient with USD 44 million. In Asia, Indonesia has received USD 40 million.

Figure 2.4 EU-FLEGT Recipients 2001-2010¹⁵⁶



Source: European Forestry Institute, FLEGT Action Plan Progress Report, EU FLEGT Facility European Forest Institute (2011).

134. Parallel to EU FLEGT Facility, the European Forest Institute's EU REDD Facility was established in December 2010 to provide effective support to the development and implementation of REDD+ policies in developing countries. It aims at helping developing countries build their capacity and improve forest governance for REDD+ through analysis, advice, outreach and training, as well as by facilitating access to and benefit from different on-going initiatives.¹⁵⁷

135. The Forest Law Enforcement, Governance and Trade Support Programme for African, Caribbean and Pacific countries (ACP-FLEGT Support Programme) is a collaborative effort

¹⁵⁶ ITTO, FLEGT Action Plan Progress Report < 2003-2010 (2011).

¹⁵⁷ See http://www.euflegt.efi.int/portal/home/redd/eu_redd_facility/.

among the Food and Agriculture Organization of the United Nations, the European Commission and the African, Caribbean and Pacific Group of States (ACP) to address forest law enforcement, governance and trade issues in ACP member countries.

136. Pilot projects target small to medium-sized initiatives that remove bottlenecks, fill gaps in current programmes or test systems to improve law enforcement, governance or trade activities. Each pilot project is limited to a maximum of EUR 100,000. Technical assistance is provided directly by FAO staff or other experts identified by the proponent to review policy or regulatory issues, empower institutions to implement FLEGT elements or improve communications among ACP stakeholders. Each technical assistance proposal is limited to a maximum of EUR 50,000.

137. Governance projects are typically public financed projects. Public projects on governance are quite representative, and account for 10.5% of total public projects related to forestry in Latin America and the Caribbean region. A total of 46 projects related to forest governance were identified by the consultant in LAC for the 2006-2012 period. These projects correspond to USD 680 million, an average of USD 167 million per year during this period.

2.4.2 UNFF Facilitative Process

138. As part of its work to address forest financing, the special session of the ninth session of the United Nations Forum on Forests, in October 2009, established the Facilitative Process (FP) to assist Member States to mobilize funds for forests in a bottom-up fashion, notably by providing information and data from the field. The Resolutions of the Special Session of UNFF9, and of UNFF9,¹⁵⁸ have equipped the FP with ten functions that guide its implementation.

139. Immediately following its creation, the FP was launched with a project on identifying gaps, obstacles and opportunities in financing SFM in Small Island Developing States (SIDS) and Low Forest Cover Countries (LFCCs). The SIDS/LFCC project was strategically selected to begin the FP following the report on forest financing commissioned by the Advisory Group on Finance of the Collaborative Partnership on Forests, which showed that the two categories to have suffered the most from the drop in donor forest financing in the past two decades were SIDS and LFCCs.

140. A series of 11 preliminary studies were carried out on forest financing in SIDS and LFCCs, which laid the basis for discussions in four inter-regional workshops that brought together, and will bring together, experts and practitioners at national, regional and international levels. The last of these workshops will be held in Fiji in July 2012, following which the identified gaps, obstacles, opportunities and recommendations will come together in a common forest financing strategy for SIDS and LFCCs.

141. Additional projects have since been implemented as part of the FP. A parallel project on forest financing in Africa and Least Developed Countries (LDCs) was started in 2011 with German funding, as well as more recently two projects on studying the implications of the price of carbon as well as REDD+ funding on forest financing.

¹⁵⁸ The text of both resolutions, along with all relevant background documents on the FP, are available at the following website: <http://www.un.org/esa/forests/facilitative-process.html>.

2.4.3 Payments for Ecosystem Services (Other than Carbon)

142. The basic idea behind payments for ecosystem services (PES) is that those who provide environmental or ecosystem services should be compensated for the cost of doing so. It entails the provision of payments to forest landowners or rights-holders in exchange for the landowners'/rights-holders' investment and actions to maintain a specified area of forestland and provide beneficial goods and services, such as clean air, clean water, carbon sequestration and flood control to society.¹⁵⁹ The intention behind payments for ecosystem services schemes is to internalize currently externalized costs. In contrast, the current economic system only rewards the conversion of ecosystems for alternative land uses, thereby reducing the flow of valuable services these ecosystems provide. Payments for ecosystems services were developed to incentivize land users to properly manage and conserve their natural environment thus ensuring the flow of ecosystem services.¹⁶⁰

143. PES are defined as “formal and informal contracts in which landowners are remunerated for managing their land to produce one or more ecosystem services.”¹⁶¹ Six types of ecosystem markets have been identified by the UNDP, with value estimates for each in the billions:¹⁶² Biodiversity offset and compensation programmes; Payments for watershed services; Sustainable fisheries; Green commodities; Bio-prospecting; and REDD+.

144. Payment for ecosystem services has captured the imagination of forest finance professionals for a number of years as a potential mechanism to access additional new resources for forests. However the most important source of payments for services is still international governmental and non-governmental support. While the growth and development of ecosystem services markets does need additional investment and support in order to become institutionalized into markets, it is important for those in the forest sector to be realistic about the limitations of markets in generating payments for good forest management and relatively intangible ecosystem goods and services.¹⁶³

145. It is also an idea that presents the forest sector with a challenge – that of consistently and accurately quantifying the goods and services provided by forests and their associated monetary values. Once those figures are determined, the information must be communicated to the marketplace and to the public. Without this information, barriers to transforming forest goods and services into perceivable marketplace commodities are likely to remain.

146. There have been cases of successful forest-related PES schemes, particularly related to carbon sequestration, provision of clean water and ecotourism,¹⁶⁴ though the mechanism has not yet become entrenched as a widespread market driven tool. Most projects concerned with payment for services are implemented as pilot schemes especially for improved management of

¹⁵⁹ Peter Gondo, Financing sustainable forest management in Africa (2010).

¹⁶⁰ Pagiola and Platais, Payments for Environmental Services (2002).

¹⁶¹ Mercer, Cooley and Hamilton, *Taking Stock: Payments for Ecosystem Services in the United States* (2011), p. 1.

¹⁶² Buchner et al., *The Landscape of Climate Finance*, Climate Policy Initiative (Venice: 2011). p. 38.

¹⁶³ Y. Kamara, Existing and potential forest financing mechanisms for smallholders and community forestry in West Africa (2011).

¹⁶⁴ Ibid.

natural forests and rehabilitation of degraded areas. Few large-scale operational cases exist; however, examples from TEEB in Mexico, Costa Rica and Cameroon identify annual per hectare values from forests for ecosystem services.¹⁶⁵

147. User fees are also considered here as a form of PES. User fees are mostly generated through tourism and recreation activities in areas with high conservation value and are typically implemented at the project level through entrance fees to national parks, as well as licenses and permits, but can also be implemented at the national level. The most common example of PES are payments for watershed services (PWS) where downstream water users pay upstream landholders to carry out sustainable land practices and so increase the quantity and quality of water running downstream. PES are often voluntary arrangements where these users find it in their economic interest to pay. For example, in PWS, payments are often made by beverage companies, municipal governments, hydroelectric generators or through household water use fees.¹⁶⁶ PES can be government mediated when legislation is implemented to generate new and additional finance through the introduction or increase of water fees (see e.g., Mexico PSAH).

148. In Germany, the law restricts the possibilities for PES because of high legal and constitutional demand on sustainable, multifunctional and socially reliable forest management. Forest owners need to shape a concrete marketable product with added value. This demands certain skills. There is nature protection by contract but it is not widespread. There are other individual examples like payment for silvicultural treatment for water protection paid by breweries.¹⁶⁷

Box 2.2 The Pacific Northwest and Ecosystem Service Markets

The US Forest Service Deschutes and Willamette National Forests are working with the Pacific Northwest Regional Office, Pacific Northwest Research Station and local stakeholders to address evolving forest management needs and priorities. They are working on various projects including developing metrics that can support forest management decision-making and be used in ecosystem service markets that benefit private landowners. Their emphasis is on assessing forest values at the landscape scale. <http://willamettepartnership.org/>

Source: Catherine Karr-Colque, UNFF National Focal Point for the US, 15 February 2012.

A. Debt-for-Nature Swaps

149. Debt-for-nature swaps have also contributed to forest conservation programmes in developing countries. As an example, a recent agreement between the United States and Indonesia is estimated to generate USD 28.5 million per year for forest conservation in Indonesia.¹⁶⁸

¹⁶⁵ TEEB, *The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB* (2010).

¹⁶⁶ Stanton et al. (2010).

¹⁶⁷ German UNFF National Focal Point, response to questionnaire, 8 March 2012.

¹⁶⁸ Buchner et al., *The Landscape of Climate Finance*, Climate Policy Initiative, (2011), p. 38.

150. A debt-for-nature swap is a financial mechanism dating back to the mid-1980s that enables developing countries to reduce their foreign debt via conservation activities. The two main types of debt-for-nature swaps in use are: (1) commercial debt-for-nature swaps, whereby commercial creditors sell the debt at a discount on the secondary market to third parties such as NGOs; and (2) bilateral debt reductions, where the creditor governments will cancel or discount a portion of debt in exchange for the debtor country's commitment to finance local conservation activities.

151. This mechanism has allowed many countries such as Bolivia and Costa Rica to exchange tens of millions of dollars in debt to protect their most pristine and biologically reproductive areas. However, fewer transactions are occurring today because debt restructuring and cancellation are reducing developing countries' debt more significantly. Nonetheless, agreements such as that between France and Madagascar cancelling USD 20 million in debt in 2008 to triple the size of its protected areas, as well as that between the USA and Brazil in 2010 for USD 21 million to fund ecosystem protection initiatives are still occurring.¹⁶⁹

B. Landscape Restoration

152. Approximately 30% of global forest cover has been completely cleared and a further 20% has been degraded. More than two billion hectares of deforested and degraded forestland worldwide may have the potential to be restored. A restored landscape can accommodate a mosaic of land uses such as agriculture, protected reserves, ecological corridors, regenerating forests, well-managed plantations, agroforestry systems, and riparian plantings to protect waterways. Forest and landscape restoration is more than just planting trees. It goes beyond afforestation, reforestation and ecological restoration to improve both human livelihoods and ecological integrity.¹⁷⁰

153. According to FAO,¹⁷¹ forest policy goals need to address main societal issues and be aligned with a country's development goals. All concerned sectors and stakeholders should be involved in achieving these goals. Such a scope requires a broad perspective of land use and natural resource management.

154. Forest and landscape restoration is implemented at a landscape scale rather than a single site, considering social, economic and biological aspects in the landscape. According to IUCN,¹⁷² there is no single restoration technique that can be applied to all situations. The practical techniques may include activities such as agroforestry, enrichment planting and natural regeneration at a landscape scale. This involves among other issues, policy analysis, training and research.

¹⁶⁹ See: WWF Debt-for-Nature Swaps

<http://www.worldwildlife.org/what/howwedoit/conservationfinance/debtforatureswaps.html>;

Also see: Econook (November 2011), p. 55. <http://www.fao.org/docrep/015/i2455e/i2455e04.pdf>

¹⁷⁰ World Resources Institute, Forest and Landscape Restoration, <http://www.wri.org/project/forest-landscape-restoration> (2012).

¹⁷¹ FAO, Developing effective forest policy, FAO Forestry Paper 161 (2010).

¹⁷² IUCN, Principles and Practice of Forest Landscape Restoration: Case studies from the drylands of Latin America (2011).

155. Opportunities for forest landscape restoration are largely related to developing tools for the private sector to carry out such projects in order to make their rural properties meet environmental requirements. For example, the government of the state of Sao Paulo, Brazil, demands that landowners recover the riparian forests, called permanent preservation areas. The work is carried out with native species or through assisted regrowth with pre-determined demarcation and fencing when there are also cattle raising activities in the landownership. In general, the areas there that need funding are covered with secondary forests, and include restoration of degraded forestland and promotion of agroforestry systems to restore forest landscape.

C. Products/Services, Eco-labeling/Certification Schemes/Green Commodities

156. Products/services eco-labeling and certification schemes were developed as a way for forest landowners and producers to be able to generate a price premium and/or gain access to markets by establishing environmental and, in some cases, social, product standards. Verification procedures were set up to ensure initial and continuing compliance with the specified standards. While a large number of producers and landowners around the globe have undergone one or more of the various certification and/or eco-labeling procedures available, there has yet to be a distinctive and recognizable price-premium for certified products. Additionally, while access to some markets has improved for those who have undergone certification, debate continues about how to improve harmonization between private sector certification schemes and the initiatives focused on improving forest governance and lawful trade of forest goods, such as FLEGT (Europe), the Lacey Act (USA) and others.¹⁷³

157. Nonetheless, the area of certified forest in ITTO producer countries almost doubled to 17.0 million hectares between 2005 and 2010.¹⁷⁴ The area of certified forest in Africa tripled during the same time period. However, it is important to note that forest certification remains out of the mainstream, particularly for tropical forests, as the areas prone to desertification are small. Slow development in this field is associated with weak governance, inadequate management systems of forest enterprises and high transaction costs. In addition, price premiums from the international markets have been limited mainly to niche markets, resulting in the primary incentive for producers to be in facilitating access to export markets, which require SFM certification.¹⁷⁵

158. Similar to certified forest products, green commodities also generate finance directly from consumers by applying a price premium to goods that are produced using biodiversity-friendly methods. A common example is shade-grown coffee, which is produced under a canopy of tropical trees rather than in a deforested field to provide habitat for tropical species along with other ecosystem services such as climate change mitigation. When consumers purchase a green commodity, they pay a certain price for the consumption of the private good and an additional

¹⁷³ The Global Mechanism and CATIE, Incentive and market-based mechanisms to promote sustainable land management: framework and tool to assess applicability (December 2011).

¹⁷⁴ Blaser et al., Status of Tropical Forest Management (ITTO, 2011).

¹⁷⁵ Markku Simula, Report on Financial Cost-Benefit Analysis of Forest Certification and Implementation of Phased Approaches (ITTO, 2004).

price premium for the provision of the public good (in this case the sustainable use of biodiversity and ecosystem services).

159. In 2009 green commodities generated USD 2 billion annually, split 50/50 between developed and developing countries (100% revenue generated in developed countries with delivery going to both developed and developing countries). The potential scale of finance from green commodities is significant. Global retail sales of certified agricultural and forest products accounts for over USD 42 billion and could reach USD 210 billion by 2020.¹⁷⁶ Only a fraction of the total market value, however, will be available to finance biodiversity and ecosystem services on the ground. By 2020 certified products could generate new and additional ecosystem finance of around USD 10.5 billion annually to compensate farmers for implementing more sustainable agricultural practices (based on a 5% premium passed on to farmers).

160. Funds are delivered through supply chains that have gone through some form of certification. By certifying production, the ecosystem services provided can be bundled and sold with the commodity on a global scale. While the price premium for these services varies, buyers often pay about 5% to 10% of the value at the farm gate. E.g. sales of Rainforest Alliance certified coffee were estimated to total 100,000 metric tonnes in 2009, meaning farmers received around USD 22-26 million in return for the ecosystem services they provided that year.

D. Eco-tourism

161. Ecotourism may generate important economic and social benefits, mostly associated with protected areas and surrounding communities. A well-developed ecotourism industry can contribute to shift local attitudes, favor conservation and reduce biodiversity threats and deforestation. This approach is an indirect opportunity to contribute to investments in sustainable forest management. In order to make ecotourism development more efficient and increase its contribution to financing sustainable forest management, it is necessary that the public sector invests in: (1) Increasing the information available to potential visitors to protected areas and other ecosystems outside the traditionally visited areas; (2) Creating incentives for institutional cooperation and investment to promote ecotourism; (3) Developing mechanisms for collection of visitors' fees, concessions and reinvestment in protected areas; and (4) Improving the skills of protected area administrators to manage ecotourism.¹⁷⁷

Conclusions

162. The emergence of forest carbon market mechanisms in recent years, together with increased activities on biodiversity and sustainable land management, as well as FLEGT programmes and increased attention to PES, has scaled up significant amounts of resources at all levels, and across and within different countries and regions. These developments have channeled new resources, generated mainly from donor countries, toward forest activities and led to increased recognition of the significance of forests, their products and services for the success of other sectoral and cross-sectoral policies and actions. Forest values, more than ever before, are

¹⁷⁶ Ecosystem Marketplace, Payments for Ecosystem Services: Market Profiles (2008).

¹⁷⁷ GEF, Fostering Sustainable and Competitive Production Systems Consistent with the Conservation of Biodiversity (2010).

recognized and integrated into the work of various conventions, organizations and countries, underlying the multiple benefits of forests that go beyond a specific sectoral issue.

163. The Rio Conventions have relevant forest activities and financing initiatives limited to the objectives and activities within those conventions. New financing initiatives that have some relation to forest-related projects, outside the private sector, are linked mainly to climate change and then biodiversity.

164. The potential for REDD+ to contribute to forest financing is large. Apart from REDD+, however, the forest-related component represents a small portion of the overall value of other climate financing activities, largely due to exclusion of forest carbon credits in those activities.

165. Many organizations advocate that REDD+ has the potential to mitigate climate change at much lower costs than other technology-based abatement mechanisms, while contributing to biodiversity and forest conservation.^{178,179} This points to the growing recognition of sustainable forest management as the framework that covers all aspects including biodiversity conservation and emissions reduction efforts.¹⁸⁰

166. Combating land degradation and desertification offers an important financing opportunity for countries to leverage investments across multiple sectors. The value-added of investment into SLM lies in its potential to enhance sustainability and resilience of ecosystem service flows in production systems, especially those that are prone to persistent risks of degradation and desertification.

167. Funding support for forest governance through bilateral and multilateral approaches is relatively limited. In terms of attracting much needed private sector investment, poor governance and limited law enforcement are likely to make forests less attractive by posing unacceptable levels of risk.

168. The Facilitative process that was initiated by the UNFF has only been implemented over a very short period of time but has already made significant progress. The FP has developed approaches for facilitating access to forest financing. However the FP has also helped to highlight the numerous challenges and constraints to accessing these funds, as well as the thematic and geographical gaps that need to be addressed. The FP has the potential to further promote collaboration on forest financing at both thematic and geographical areas.

169. New and innovative market-based sources of finance are developing in many countries, including for example PES schemes, bioprospecting, eco-tourism, greening commodities and complimentary biodiversity payments in REDD+. Many of the innovative financial mechanisms require policies for recognition and valuation of vital environmental services that forests provide, as well as broader enabling frameworks that ensure reinvestment of monetary benefits in the

¹⁷⁸ UNEP FI, *REDDy Set Grow Part I*, (May 2011), p. 9.

¹⁷⁹ TEEB: The Economics of Ecosystems and Biodiversity, *The Report for Business – Executive Summary* (2010), p. 11.

¹⁸⁰ *Ibid.*, p. 10.

forest sector. Socio-economic valuation of forests is also needed to be able to determine economic returns and to include them in investment agreements and political decision-making.

170. Reviews caution against the assumption of global applicability of the PES mechanisms. Further analyses are necessary to explore the wide range of potential services and consumers of PES for forests including those related to global public goods such as biodiversity and climate change. The most important source of payments for services is still international governmental and non-governmental funding. Due to various national legislative frameworks and laws, PES is dealt with differently and to a different extent from one country to another. The other environmental services of forests are important on national and local levels. There is ongoing debate around the concern of the marketization of nature through payment schemes for environmental services, and this debate will impact extensively the future of PES schemes.

171. Green commodities have emerged as an important innovation that, by bundling environmental benefits into commodity markets, enables ecosystems services to be traded in global markets. For green commodities to succeed, complementarity between environmental and production goals and markets needs to be large enough to support a price premium for public goods. Compared to other green products, therefore, agricultural commodities are a promising policy option, since sound environmental practices often lead to sustained commodity production in the long-term and agricultural markets operate at a national to global scale.

CHAPTER 3: NEEDS AND GAPS IN FOREST FINANCING

Introduction

1. Despite initiatives and efforts to increase the financial resources available for SFM, especially in developing countries where the bulk of natural forests are found (and where there are high rates of deforestation), the resources remain insufficient. The lack of forest finance stems partly from countries' inability to quantify and articulate the full potential of forests, as well as the already considerable funds that flow between forests and other sectors. The perception of forests among decision makers remains that of a net expenditure rather an opportunity for sustainable development. This situation is not limited to developing countries, as many developed countries also face multiple challenges to ensure adequate financing to sustainably manage their forests and efficiently run their forest sectors, with increasingly fewer resources and staff.

2. The situation is particularly critical in regions such as Africa, where the new innovative financing mechanisms have had little impact due to a number of limiting factors. Weak institutional capacity, poverty (and generally low levels of socio-economic development), unstable political and economic environments and unfavorable national policies and legislation all contribute to this situation. In this regard, new financing systems that address the financial needs of different actors are needed, as well as different management objectives that take into account the special conditions of different forest ecosystems and the socio-economic conditions of each country.

3. Sustainable forest management requires substantial financial resources, but so far the financial resources mobilized remain insufficient, particularly in developing countries. Many attempts have been made since the UNCED conference in 1992 to estimate the financial needs for forest management in a bid to boost financial resource mobilization. Estimating finance needs for the implementation of SFM is difficult due to variations in local conditions and other factors.¹⁸¹ It is especially difficult to estimate various aspects of SFM such as the financing needs for biodiversity conservation and land degradation issues. The problem involves three main elements:

- i. Estimating the opportunity costs of preventing deforestation or forest degradation or conserving forest environmental services;
- ii. Facilitating investment to manage existing forests sustainably and to create new forests through planting for production purposes or for restoration of degraded forests and lands;
- iii. Developing upstream or complementary investment in capacity building, information systems, research, technology transfer, development of financing mechanisms and their promotion, and other development.

4. It has been estimated that globally the required funding for sustainable forest management is between USD 70 to 160 billion per year.^{182,183,184} Forest areas not used for production are

¹⁸¹ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on all Types of Forests* (2008).

¹⁸² C. Chandrasekharan, *Status of financing for sustainable forestry management programs* (1996).

rarely self-financing, requiring subsidies and/or direct actions by governments to manage these areas properly. Financial resources are often insufficient to manage vast forest areas.

5. Estimates for the amounts required to halve deforestation range from USD 20 to USD 40 billion per annum by 2020. USD 4 to USD 7 billion per annum would be needed by 2015 to reduce deforestation by 25%, which is almost double of the level of resources that was estimated.¹⁸⁵

6. While many of the problems and challenges countries face in financing their forest activities are broadly similar, the extent and severity of these challenges vary from country to country and region to region, and from one thematic group of countries to another. The similarities and differences in challenges and opportunities for financing forests are directly related to the extent and quality of forests, as well as to the overall socio-economic situations in those countries and regions. A review of the situation in the Latin America and Caribbean region, Africa, LFCCs and SIDS can highlight the gaps as well as the different needs of countries.

7. The estimates provided are no more than indicative by nature. They are useful to illustrate the order of magnitude of what is required for the achievement of SFM. The funding available for forests from all sources falls far short of even the most conservative estimates. This is especially true when considering not just the carbon value of forests but the financing of all seven thematic elements of SFM and financing SFM as defined in the forest instrument.

8. This chapter reviews the most critical thematic and geographic gaps and needs related to forest financing, and is closely connected to the issues and themes that were discussed in Chapter 2. The scale and sources of their finance have also been examined in order to determine current gaps and opportunities for further increase in funding flows. The main objective is to contribute to the identification of necessary actions and measures to be undertaken for financing SFM. While this chapter is focused on ODA flows to specific thematic areas or issues such as biodiversity and climate change, the overall flow of financing to forests and related areas has been broadly discussed in Chapter 1. To provide a more accurate analysis of the situation, this chapter will discuss these issues in further detail.

3.1 Biodiversity

9. The 2008 AGF study showed that “funding through new instruments and various international and regional initiatives is likely to increase in the future,” but cautioned that the “increased funding will most likely be linked to the broader climate change and conservation agenda,” which would benefit middle income countries more than low income countries,

¹⁸³ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on all Types of Forests* (2008).

¹⁸⁴ WWF (2009).

¹⁸⁵ Markku Simula, *Analysis of REDD+ Financing Gaps and Overlaps, Report for the REDD+ Partnership* (2010).

especially least developed countries.¹⁸⁶ This concern is similar for countries with low or zero deforestation rates, as well as low forest cover countries and forest countries in arid zones.

10. The Millennium Ecosystem Assessment demonstrated the local, national and global importance of forests and other ecosystems for human wellbeing, socio-economic development, poverty reduction, environmental conservation and achievement of the Millennium Development Goals.¹⁸⁷ Despite covering only a fraction of the planet, forests harbor over half of the world's terrestrial biodiversity. The multi-functional value of forests is becoming increasingly recognized, including forests' role in providing global public benefits in biodiversity conservation.

11. However, environmental protection expenses, including biodiversity and ecosystems investments, are still insignificant or very marginal elements in the national budgeting process in both developed and developing countries.¹⁸⁸ No major biodiversity-rich country has allocated more than 1% of central government expenditure to environmental protection.

12. The current estimated level of funding for biodiversity and ecosystem services is between USD 36 billion and USD 38 billion annually, with less than half of this (USD 15 billion to USD 16 billion) spent in developing countries.¹⁸⁹ These figures fall well below the estimated cost of USD 300 billion per year required to implement a fully comprehensive global conservation programme.

13. The majority of current biodiversity and ecosystem finance (USD 29 billion) is delivered through traditional non-market sources including government budget allocations, official development assistance (ODA) and philanthropy. The next category of finance is direct markets for natural capital including biodiversity offsets and forest carbon markets. It is estimated that these sources generate approximately USD 3 billion to USD 4 billion for biodiversity and ecosystem services. Indirect markets, the third finance category, include innovative mechanisms such as green commodities and natural capital bonds, which currently deliver approximately USD 4 billion per year but could potentially raise USD 37 billion in 2020. These trends in global expenditure demonstrate a significant remaining potential and the need for the international community to expand the use of new and innovative sources of finance to close the gap in global biodiversity financing.

14. The total development assistance marked for biological diversity, including that marked for biodiversity and climate change, biodiversity and land degradation, as well as biodiversity, climate change and land degradation, was USD 3.4 billion in 2008 (approximately 3% of total ODA), provided by 21 developed countries, the EU Institutions and the International Development Association (IDA), an amount that was lower by 1% than the USD 3,428 million

¹⁸⁶ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests* (2008), p. v.

¹⁸⁷ Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Current State and Trends, Volume 1, Findings of the Working Group of the Millennium Ecosystem Assessment*. (Washington: Island Press, 2005).

¹⁸⁸ Secretariat of the Convention on Biological Diversity *Global Monitoring Report 2010 – Innovative Financing for Biodiversity* (2010). UNEP/CBD/COP/10/INF/22.

¹⁸⁹ Charlie Parker and M. Cranford, *The Little Biodiversity Finance Book*, Global Canopy Programme (2010).

marked in 2007.¹⁹⁰ More than two thirds of these financial flows have been channeled through bilateral donor institutions and development agencies. The official bilateral assistance for biodiversity has improved considerably from 2007 in several developed countries. Overall, the biodiversity assistance has increased steadily over the past decade, a tripling from less than USD 1 billion to over USD 3 billion. This increase can be partially explained by better and wider reporting in the recent years. On the two-year average basis (2005-2006 versus 2007-2008), twelve governments reported significant percentage increases in their bilateral assistance to biodiversity.

15. In 2008, Asian countries received USD 1.5 billion of official development assistance for biological diversity, a nominal decrease by 18% from 2007. Over the period from 2000 to 2008, aid to biodiversity accounted for 3.1% of overall official development assistance to Asia. Japan provided nearly half of all the bilateral assistance to the region, with the Netherlands, Germany and Denmark following. Australia, France, the European Union, Canada and Norway were also significant contributors in sustaining biodiversity in the region. Other major donors were the United Kingdom, Italy, Switzerland and Finland.

16. The LAC region's rich biodiversity faces the great challenge of combining poverty alleviation and economic growth with sustainable use and conservation of biodiversity.¹⁹¹ The consultant identified a total of 15 projects related to biodiversity there, all public, for the period 2006-2011. The total investment in the period was USD 157 million, or an average of USD 40.6 million per annum.

17. For ODA, in 2008, the Latin America and the Caribbean region received USD 460 million of aid for biodiversity, a decrease of 6.7% from 2007. Over the period 2000-2008, aid for biodiversity accounted for 4.4% of overall official development assistance, the highest among all regions. In Africa, the volume of biodiversity assistance has fluctuated over the years. Although there is a trend towards growth in biodiversity funding, considerable space remains for increases in external finance in the coming years.

3.2 REDD+ Needs Assessment

18. The most recent analytical work that estimates the financing needs related to forest management has focused on reduced deforestation and forest degradation. The REDD+ mechanism has three main phases which needs to be considered in estimating the financing needs:

- i. Phase 1 – readiness (development of national strategies; design of action plans, policies and measures; organization of the REDD+ process; and initial capacity building);
- ii. Phase 2 – implementation of REDD+ strategy (policies, measures and action plans);

¹⁹⁰ Secretariat of the Convention on Biological Diversity, Global Monitoring Report 2010 – Innovative Financing for Biodiversity (2010). UNEP/CBD/COP/10/INF/22.

¹⁹¹ European Tropical Forest Research Network, Financing Sustainable Forest Management (2008).

- iii. Phase 3 – implementation of performance-based actions through e.g. payment schemes for verified emissions reductions and removals.

19. *Phase 1 Estimate:* One of the most comprehensive reviews relating to forest carbon finance has been carried out for the REDD+ Partnership in 2010,¹⁹² based on the REDD+ Financing and Activities Survey prepared by the Intergovernmental Taskforce for the 2010 Oslo Climate and Forest Conference, as well as the initial results from the REDD+ Partnership’s Voluntary REDD+ Database and programme documents from FCPF, UNREDD and FIP.

20. Based on an analysis of readiness plans in 21 countries that report to the FCPF, UN-REDD or both,¹⁹³ the average costs of this phase vary from USD 4 million to USD 27 million per country. These costs do not represent a significant barrier, as the current financing sources (mainly FCPF and UN-REDD) have been able to increase the number of countries working on the REDD+ readiness phase.

21. *Phase 2 & 3 estimates:* There is wide variation in estimates of the economic costs of reducing deforestation, both regarding the magnitude of achievable emissions reductions and the associated costs. Although not universally supported, these figures provide a range of estimated costs of reducing deforestation across different targets and timeframes.

Table 3.1 Estimates of Costs for Phases 2 & 3

Target	Timeline	Scale (USD billion/yr)	Source
25% reduction in deforestation	2015	4-7	IWG-IFR ¹⁹⁴
50% reduction in deforestation	2030	10.4	Blaser & Robledo ¹⁹⁵
	2030	17-33	Eliasch Review ¹⁹⁶
	2030	17.2-28	Kindermann et al. ¹⁹⁷
	2020	22.5-37.5	EC ¹⁹⁸
	2025	33.5	Obersteiner et al. ¹⁹⁹

¹⁹² M. Simula, Analysis of REDD+ Financing Gaps and Overlaps, Report for the REDD+ Partnership (2010).

¹⁹³ See:

www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/FCPF%20Readiness%20Progress_PC11.pdf

¹⁹⁴ IWG-IFR (2009).

¹⁹⁵ J. Blaser and C. Robledo, Initial analysis on the mitigation potential of the forest sector, paper prepared for the UNFCCC Secretariat by Intercooperation (Bern, Switzerland: 2007).

¹⁹⁶ Eliasch Review (2008).

¹⁹⁷ G. Kindermann et al., Global Cost Estimates of Reducing Carbon Emissions Through Avoided Deforestation, PNAS. Vol. 105 No. 30. 10302-10307 (2008).

¹⁹⁸ European Commission, Addressing the Challenges of Deforestation and Forest Degradation to Tackle Climate Change and Biodiversity Loss, communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2008) 645 final (Brussels: 2008).

100% reduction in deforestation			
In 8 countries		5-10	Greig Gran ²⁰⁰
	2030	12.2	Blaser & Robledo ²⁰¹
In top 20 countries (95% reduced)		30	Strassburg et al. ²⁰²
	2100	25-185	Sathaye et al. ²⁰³

Source: Parker et al., Little Climate Finance Book, (2009).

22. The Informal Working Group on Interim Finance for REDD+ (IWG-IFR) estimates that if the financing of USD 23-38 billion were made available for the 2010-2015 period for results-based incentives and capacity building, complementing other REDD+ efforts, a 25% reduction in annual global deforestation rates may be achievable by 2015.²⁰⁴ These costs are comprised of USD 20-35 billion for payments for emission reductions and USD 3 billion to invest in preparatory activities. The financing need is highly sensitive to the agreed level of payments to developing forest countries per ton of reduced or avoided emissions. Efforts on this scale could, if effective, reduce annual deforestation by about 3 million hectares per year, for an accumulated total emission reduction of 7 billion tons of CO₂e for the period.

23. The above estimates are mostly based on calculations of opportunity costs, which are foregone net benefits of alternative land uses. Such land uses are generally associated either with conversion of forestland to other purposes such as crop production, grazing or mining, or with the unsustainable use of forest resources that result in forest degradation and thereby further carbon emissions.

24. In a well-functioning market economy, opportunity costs can be an indicator for the minimum amount to be paid to forest owners or users for not converting forestlands into other uses. This requires conditions whereby it can be assumed that decisions are primarily made based on economic factors.²⁰⁵

25. There are several global and regional estimates of opportunity costs of emissions reductions from deforestation. But a few estimates exist for such costs of degradation in spite of the fact that there is a general agreement that the respective emissions are significant as country-level analyses have shown.²⁰⁶

¹⁹⁹ M. Obersteiner et al., Economics of Avoiding Deforestation (Trieste: 2006). Updated to G. Kindermann et al., Predicting the Deforestation Trend under Different Carbon Prices, FEEM 7(8) (2007).

²⁰⁰ M. Grieg-Gran, The cost of avoiding deforestation, Update for the Eliasch Review of the background paper prepared for the Stern Review of the economics of climate change (London: 2008).

²⁰¹ J. Blaser and C. Robledo, Initial Analysis on the Mitigation Potential in the Forestry Sector, (2007).

²⁰² B. Strassburg et al., An Empirically-Derived Mechanism of Combined Incentives to Reduce Emissions from Deforestation (2008).

²⁰³ J. Sathaye et al., GHG Mitigation Potential, Costs and Benefits in Global Forests: A Dynamic Partial Equilibrium Approach, Energy Journal, Special Issue 3: 127-172 (2007).

²⁰⁴ IWG/IFR, Report on the Informal Working Group on Interim Finance for REDD+ (IWG/IFR) – Discussion Document (2009).

²⁰⁵ H. Gregersen et al., Does the Opportunity Cost Approach Indicate the Real Cost of REDD+? Rights and Realities of Paying for REDD+, (2010).

²⁰⁶ Angelsen, ed. Realising REDD+: National Strategy and Policy Options, (2008).

26. Based on the various available studies, the IWG-IFR estimated that approximately USD 20 billion would be required by 2015 towards a 25% reduction in deforestation and an additional USD 4 billion for reduction of emissions from forest degradation.²⁰⁷ However, these costs do not include transaction costs, which may be substantial. On the other hand, private opportunity cost does not necessarily reflect the incentive required to be paid, as significant increase in emission reductions from forests could be achieved by improving law enforcement.

27. When considering the timeframe, the short and even medium term opportunity cost estimates of reduced deforestation are likely to overstate the immediate financing opportunities of REDD+, as the costs of effectively implementing land reforms, land use planning and zoning, as well as various policy and legislative reforms can easily be higher than estimated, since the necessary political decisions may delay the process, as past experience has shown.

28. It is important to note that the underlying assumption of opportunity costs on absence of policy failures and market distortions is not valid in most forest situations in developing countries. Several factors limit the use of the opportunity cost approach in the forest sector, including conditions such as subsistence production in shifting cultivation, the importance of the informal sector in market transactions, illegal logging and land conversion, perverse incentives for forest conversion, etc. However, these can be addressed in country-level analyses. Cost estimates do not generally take into account numerous non-monetary benefits to forest communities and local populations who often regard these as the main incentive for conservation management of their forests.

29. Five key sources of finance have been identified to implement REDD+ in developing countries: bilateral donor agencies; multilateral and regional financing institutions and initiatives; domestic public funding; the private sector; and civil society organizations. The report also cautions for care in using the figures due to the difficulties of incomplete information.²⁰⁸ The international public sector funding for REDD+ from 2008-2012 is estimated at USD 7 billion dollars, with bilateral support accounting for more than two-thirds of the funding available.

Table 3.2 Estimated Funding Provision 2008-2012

Source/channel	USD million	%
Multilateral REDD+ programmes	1,903.0	27.0
International and regional programmes and projects	380.0	5.4
Bilateral country programmes and projects	4,764.6	67.6
Total	7,047.6	100.0

Source: Markku Simula, Analysis of REDD+ Financing Gaps and Overlaps (2010).

30. The REDD+ Partnership Voluntary REDD+ Database (VRD) provides updated insight into the provision of REDD+ related finance with the continued updating of the database.²⁰⁹ This

²⁰⁷ Markku Simula, Analysis of REDD+ Financing Gaps and Overlaps (2010).

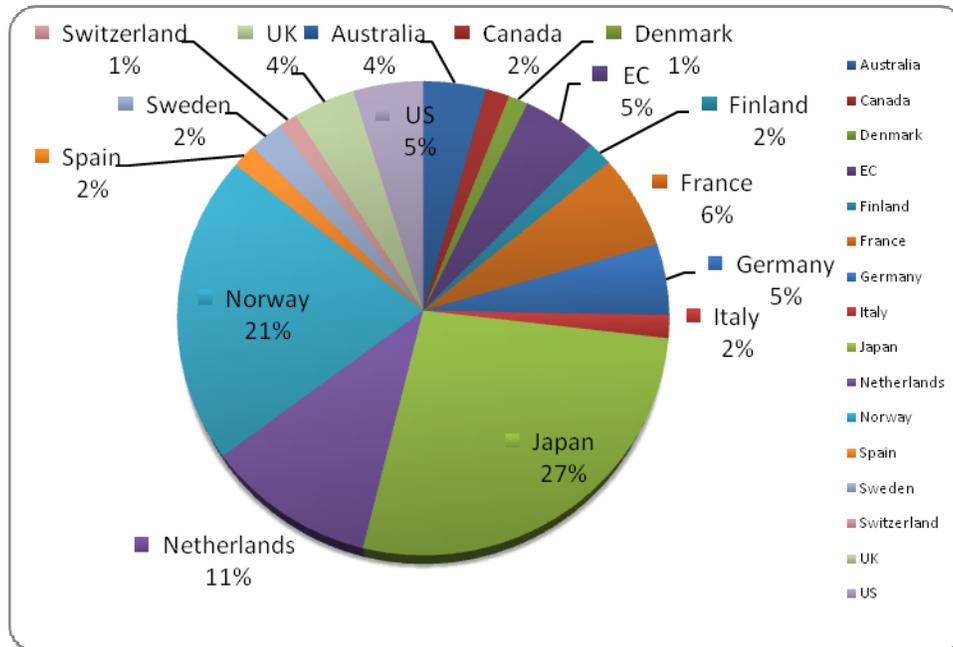
²⁰⁸ IWG/IFR, Report on the Informal Working Group on Interim Finance for REDD+ (IWG/IFR) – Discussion Document (2009).

²⁰⁹ See: <http://reddplusdatabase.org/about>

shows that REDD+ related funds declared by sources peaked in 2009 at over USD 3 billion and has ranged between USD 1.3 to 1.7 billion between 2010 and 2012. However, there are difficulties in comparing the data sets that are highlighted.

31. The VRD identifies USD 4.548 billion declared by donors through multilateral, regional and bilateral approaches since 2008. Three donors declared 59% of the total funding with Japan accounting for 27%, Norway 21.1% and the Netherlands 10.9%.

Figure 3.1 VRD REDD+ Funding Declared By Donor Countries



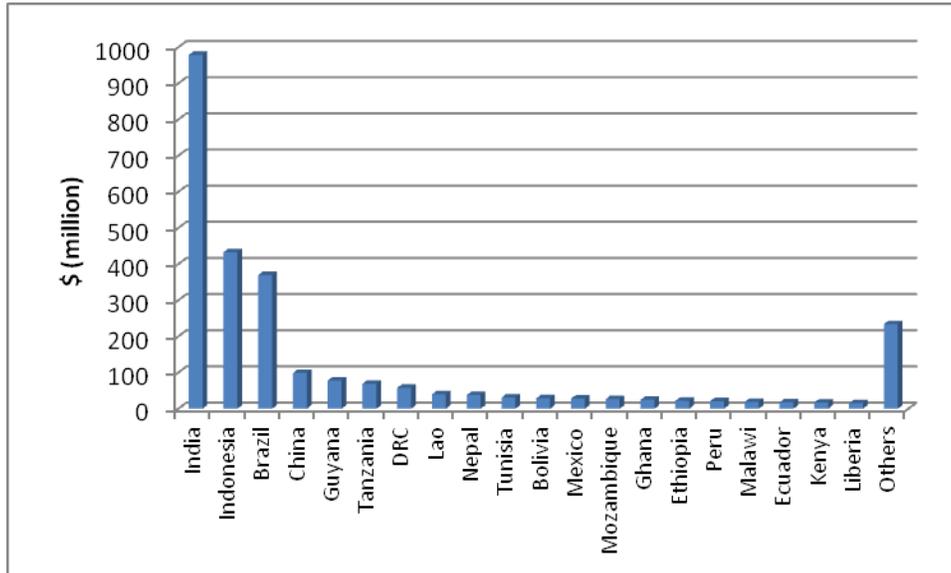
Source: VRD, reddplusdatabase.org.

32. The VRD also provides a breakdown of recipient countries and identifies USD 2.650 billion in funds allocated to 61 countries. Within these, 91% is allocated to 20 countries, with three countries (India 36.9%, Indonesia 16.3% and Brazil 13.9%) allocated over 67% of all REDD+ funding. Some 9% of the funds identified were allocated to 41 countries averaging USD 5.7 million per country; however, 15 of these countries were identified as being allocated less than USD 4 million.

33. The future scale of revenue from auctioning of carbon allowances will depend on several factors including the demand for allowances, the percentage of allowances auctioned and the percentage of revenues allocated to international biodiversity and ecosystem services. Based on current estimates, the national or international auctioning of allowances might raise USD 2-8 billion annually for ecosystem finance.²¹⁰

²¹⁰ Charlie Parker et al., The Little Climate Finance Book (2009).

Figure 3.2 VRD REDD+ Funding Recipient Countries



Source: VRD, reddplusdatabase.org.

34. While the outcomes from Durban and international support for building REDD+ readiness are a sign that forest carbon will eventually mature with at least a partly market-based mechanism, within the forest carbon markets, however, most credits are purchased voluntarily. Real expansion is not considered realistic until regulatory drivers unlock larger climate impacts and market demand. Regulation is required to increase the scale of finance that can be raised through these schemes.²¹¹ Emerging carbon markets also need for developing countries to establish national forest monitoring systems, action plans and national forest reference levels for emissions.²¹²

35. Uncertainty remains at a level that will limit private sector involvement well below the anticipated scale. The World Bank assessment indicates a future balance of carbon demand and supply and limited interest in developing new carbon initiatives unless emission commitments are strengthened.²¹³ It would appear to be prudent to make sure investments result in a range of benefits rather than a single focus.

36. There are outstanding concerns over environmental and social safeguards and ownership of forestlands and carbon, as well as the long-term financial benefits to forest communities, investors and countries participating in public or private mitigation activities. During the REDD+ readiness phase, countries are working towards creating enabling environments by adopting legal instruments to regulate carbon rights in both regulatory and voluntary markets, but the range of governmental recognition of communities' customary rights over public lands varies.²¹⁴ Other issues include forest governance related to carbon markets and equitable distribution of benefits

²¹¹ eftec, The use of market-based instruments for biodiversity protection: The case of habitat banking (2010), pp. 29-30.

²¹² FAO, "State of the World's Forests 2011" (2011), p. 62.

²¹³ World Bank, State and Trends of the Carbon market 2011 (Washington, DC: World Bank, 2011).

²¹⁴ FAO, "State of the World's Forests 2011" (2011), pp. 63-64.

with local communities and smallholders. The challenge developing countries face with respect to fostering enabling environments for carbon markets is managing growth/industrialization and the ensuing GHG emissions while also alleviating rural poverty.

37. Complexity and high transaction costs of reforestation and afforestation projects that wish to qualify for forest-based carbon trading systems are another source of concern. Transaction costs can be significant but vary substantially across governance contexts. Combined with the low capacities related to financial and business operations that are chronic in many countries, several pilot projects have proved to be unsustainable. Project failures may prove to be critical, as negative experiences could ultimately stall growth of the still young forest-carbon market.²¹⁵

38. Debates and discussions continue unresolved, such as the outcome of the ongoing climate change debate and the discussion on whether or not co-benefits should be considered in carbon trading schemes or if markets should strictly focus on accounting solely for carbon sequestered. The outcomes of these debates are likely to have major impacts on eligibility of low capacity communities and low forest cover countries for carbon trading and markets related projects.²¹⁶ Establishment of land tenure rights, clearly defined carbon ownership and effective benefit sharing mechanisms will be critical for future development of market-based forest carbon offset schemes.

3.3 Desertification

39. With an estimated 3 billion people in developing countries dependent directly on land resources, including among 70% of the world's poorest farmers, SLM represents a major opportunity for shaping the development agenda in many developing countries. SLM includes combating land degradation in production systems – agricultural, rangelands and forest landscapes – from dryland regions prone to frequent droughts to the humid tropics with rampant deforestation.

40. Deforestation and the resultant desertification adversely affect the productivity of the land, human and livestock health, and economic activities such as ecotourism. The loss of vegetation through deforestation and the resultant desertification and land degradation cause biodiversity loss and contribute to climate change by reducing carbon sequestration. Forests and tree cover prevent land degradation and desertification by stabilizing soils, reducing water and wind erosion, and maintaining water and nutrient cycling in soils. Sustainable management and use of goods and services from forest ecosystems and the development of agroforestry systems have the potential to contribute to poverty reduction, making the rural poor less vulnerable to the impacts of desertification and land degradation.

41. Specific data on financing to combat land degradation and desertification can be obtained from a variety of sources. Some of the most relevant sources include the Financial Information

²¹⁵ Y. Kamara, Existing and potential forest financing mechanisms for smallholders and community forestry in West Africa (2011).

²¹⁶ Ibid.

Engine on Land Degradation (FIELD) of the UNCCD.²¹⁷ This analysis showed that in 2007-2008, the total annual aid commitments to agriculture amounted to USD 7.2 billion, with United States (USD 1.4 billion), Japan (USD 1 billion) and France (USD 582 million) as the largest donors.²¹⁸ The Rio Marker Data of the OECD list average annual commitments for desertification of USD 2 billion for the years 2007–2009 and of USD 1.3 billion for 2010.²¹⁹ It can be estimated that about 10% of these commitments are relevant to forests within the context of investments in sustainable land and integrated ecosystem management, but there are no solid estimates to date for SLM.

3.4 Forest Financing Associated with other Issues

42. Forest activities are also crucial to development objectives in other sectors. Explicit demand for assistance in forestry was found to continue to be low overall. However, as explained in Chapter 1 of this study the demand is great for assistance in forest-related efforts as *secondary* to development objectives in other sectors.

43. This particular analysis did not rely as a prerequisite on any lengthy discussion of financing for forests, but rather relied on the mere identification of forest-related activities as a means to achieve a goal in another sector. In one category, 65% of the countries examined identified forest activities (such as reforestation) as a means to increase rural employment and/or investment. Many countries identified biodiversity conservation as a goal, achievable through reforestation, sustainable forest management and other forest-related activities. The third most relevant sector, energy, was often cited due to the pressures on forests for fuelwood, though the goals varied among the PRSPs, ranging from seeking alternative forms of energy (e.g. through technological innovation) to identifying the need for stronger institutions to support sustainable forest management to guarantee adequate supplies in future. This points to one fundamental weakness in poverty reduction strategy papers (PRSPs), national adaptation programmes of action (NAPAs), national forest programmes (nfps) and other reporting frameworks, which is that they do not require any kind of focus on financing flows to forests.

44. An example of the Access and Benefits-sharing (ABS) agreement regarding the mamala tree highlights the importance of forests for other sectors. A gene that has been found effective in the fight against HIV is contained in the tree's stemwood and bark, which have been used to develop Prostratin, an anti-HIV compound. Traditionally, mamala's components were used to make an anti-viral tea to cure hepatitis. Before proceeding with the development of Prostratin, researchers needed to obtain consent from the Samoan government, as well as from traditional healers and chiefs. Once anti-viral properties were confirmed, ABS agreements were signed.

45. Since the anti-HIV compound was discovered via traditional knowledge, the AIDS Research Alliance returned 20% of commercialization revenues to indigenous and local Samoan

²¹⁷ This website is currently undergoing an update and will be unavailable until early summer 2012. The Performance Review and Assessment of Implementation (PRAIS) Portal is another online reporting tool allowing UNCCD country Parties and other reporting entities to communicate country information. For more information, please see: <http://www.gmfield.info/>, <http://www.unccd-prais.com/>

²¹⁸ See: www.oecd.org/dac/stats/agriculture

²¹⁹ See: www.oecd.org/dac/stats/riomarkers

communities. The University of California, Berkeley, interested in cloning the mamala gene for mass production, entered into an understanding with the country's government to return 50% of net revenue to its people. To date, monetary benefits amounting to over USD 480,000 have been realized for Samoa's indigenous and local communities. Meanwhile, non-monetary benefits have included everything from education and the construction of schools to the establishment of medical clinics and an endowment for the local rain forest.

46. Meanwhile, it should be pointed out that many forest activities are piggy backed onto projects in other sectors, making the analysis of flows to forests within other sectors incredibly difficult. However, with this taken into consideration it is possible to expect the actual figures of ODA to be much larger than those reported.

3.5 Geographic and Thematic Needs and Gaps

47. Countries across the globe are grappling with numerous social, economic and environmental challenges. The global economic crisis in recent years has also exacerbated the situation by putting more pressure on countries to focus on their most urgent needs. Both developed and developing countries are constantly struggling to address multiple competing priorities, with limited resources. In this situation, many sectors including the forest sector face increased pressure to reduce their administrative and management costs and resources. As a result, needs and gaps in forest financing are now a widespread situation in many regions and countries, regardless of the degree of the development of countries and regions. However, these needs and gaps are more serious in countries that have less capacity and resources. While the following paragraphs illustrate some needs and gaps in forest financing in some regions, many of them are identical for other regions that are not discussed here.

3.5.1 LAC

48. There are four types of forests that generate products and benefits, and thus receive investments: those planted for non-wood forest products, planted for wood products, natural forests for management and those for conservation. The natural unmanaged forest area represents 71% of the total forest area in LAC countries. These forests do not generate revenues or receive investment of any kind.²²⁰

49. Despite the investments identified in LAC, a significant funding gap for the conservation of forest biodiversity remains. There is still a USD 25 billion gap occurring because 71% of the forest area in LAC remains unmanaged, resulting in a situation where funding to support sustainable forest management in the LAC region is relatively small compared to the total needs.²²¹

50. Most developing countries require capacity building efforts for forestland owners and forest managers, encompassing many pressing forestry issues. These include fire management, forest monitoring and remote sensing, forest health and invasive species, migratory species and habitat management, watershed management, protected areas and ecotourism, and sustainable

²²⁰ Ivan Tomaselli, *Forest Financing: Latin America and Caribbean Region* (2012).

²²¹ *Ibid.*

forestry practices.²²² Increasing the available funding for forest protected areas should be a priority for future forest financing. To this effect, a goal was included in the framework for reaching the 2010 target to “substantially reduce the loss of biodiversity.”²²³ Forest financing from a variety of sources will be of key importance in reaching this target.²²⁴

51. The basic products traded are wood (e.g. fuelwood, pulpwood, saw-logs and veneer logs) and non-wood (e.g. fruits, nuts, resins and others) forest products. Existing investments are in maintenance, expansion and production of natural forests under sustainable management, natural forests under conservation, and of planted forests for wood and non-wood purposes.

52. The thematic areas that are least covered by domestic public financing in LAC vary from country to country. However the most common are: initial upfront investments such as policy reform, stakeholder engagement and organization; analytical work such as baselines for PES schemes; land use planning; sustainable forest management guidelines and the associated monitoring and verification systems; restoration of degraded lands and forests; and market-based and other voluntary instruments.

53. In general, the region has the following gaps and needs:²²⁵

- i. Insufficient financing for forestry development, including funds for staff training, equipment, assets and infrastructure, scientific study and other significant activities;
- ii. Lack of financing mechanisms and excessive dependence on state budget and self-financing activities, which means weak long term financial security and financial innovation;
- iii. Inefficient links between financing and forestry needs and inefficient coordination among various agencies in the financial planning process and forestry financing;
- iv. Low levels of understanding of sustainable forest management among high level decision makers and the public at large;
- v. Ineffective strategic financial planning and administration to design and connect forestry financing with requirements of the sustainable development.

3.5.2 Africa

54. In Africa, most governments provide funding to the other thematic areas but the main challenge is that the funding levels are well below the funding needs. An analysis of the

²²² United States Forest Service, Technical Cooperation (2000).

²²³ See: CBD COP decision VIII/15.

²²⁴ European Tropical Forest Research Network, Financing Sustainable Forest Management (2008).

²²⁵ Kees van Dijk and Herman Savenije, Towards National Financing Strategies for Sustainable Forest Management in Latin America, Overview of the present situation and the experience in selected countries, FAO (2009).

financing gaps from external bilateral and multilateral financing sources is summarized in Table 3.3 below.

Table 3.3 Summary of Main External Financing Sources and their Financing Gaps

Main focal areas in forestry	Gaps
Capacity building, catalytic investments	Mainstream investments (production forests, certification, forest restoration etc.)
Poverty reduction, sustainable development, global environmental services	Mainstream investment (production forests, certification, forest restoration)
Forestry for sustainable economic development, environmental conservation	Mainstream investment (production forests, certification, forest restoration)
Agreed incremental global benefits from biodiversity, land degradation and climate change	Investment in SFM in production forests
Capacity building for SFM from sustainably managed forests	Mainstream investment
Afforestation and reforestation pilot projects, avoided deforestation	Mainstreaming to meet the demand in developing countries
REDD+ readiness building REDD+ carbon emission reduction offsets	Broader capacity building beyond REDD+ mechanisms; Upstream investment for achieving emissions reductions
Improve climate resilience Incentives for maintaining carbon-rich ecosystems	Production forests
Incentives for clear technologies (biodiversity utilization and industry efficiency)	Forests not covered
Technical assistance, support to national forest programmes	Mainstream investment, production forests, certification, forest restoration
Adaptation measures in countries that are particularly vulnerable to the adverse effects of climate	Industrial timber production. Coverage will possibly include ecosystem services. Currently very few disbursements
Afforestation/reforestation offsets	Production, analytical work
Biodiversity hotspots and other protected and conservation areas	Poverty, forests outside protected areas, production of timber products

Source: Peter Gondo, A Review of Forest Financing in Africa (2012).

55. The analysis shows that a considerable share of forest ODA is allocated to forest conservation, in line with the principle of supporting enhanced production of global public goods. In relative terms, sustainable forest management outside protected areas is one of the thematic areas least supported by external funding. Only a few donors are supporting forest management activities in natural tropical production forests, and their funding is clearly insufficient. Smallholders and natural forest management received less finance than large producers, plantations and protected areas. This is a major gap as these forests generate important public goods. Very little ODA is directed to plantation forest development and management for production purposes. This has tended to be left to the private sector and domestic public financing. However external ODA has been important in funding the establishment of protection plantations especially in the Sahelian region. The adoption of sector wide support in some countries has led to the use of ODA in a more catalytic way in most thematic areas, especially initial upfront financing. Moreover, financing mainly covers tropical forests and not all types of forests and trees outside forests.

56. New PES mechanisms, particularly REDD+, have the potential to provide financing for forest conservation, but there is still uncertainty about the funding flows and the extent to which they can support other forest management activities is still unclear. In general, PES schemes do not cover the requisite upfront investments in capacity building, implementation of policy reform, strengthening of governance, market creation for environmental services, etc., and their potential is also constrained by the principle of payment upon performance. In fact, the general observation is that upfront investment in policy reforms, capacity building and other national measures necessary for the successful implementation of the forest instrument are grossly insufficient.

57. With regard to other forest activities, although numerous sources exist for forest education, research and training, as well as forest conservation, accessing them is often constrained by eligibility criteria and procedural issues, which act as barriers, particularly for forest communities, smallholders and local NGOs and community-based organizations.

58. Unfortunately not many countries in Africa have been able to attract private sector investment in plantation forest development due to unfavorable investment conditions and natural conditions (especially in countries with low forest cover). Where private sector investment has been secured it rarely covers upfront investments, management of protected areas, forest education, policy and legislative reforms. In most of the countries, the domestic private sector in the form of small-scale enterprises is the main source of private sector funding. Most of the enterprises rely on self-financing and microfinance.

59. An analysis of the sustainable forest management thematic areas that benefit from access to microfinance services in the forest sector reveals that the following thematic areas are covered albeit not to the required levels: Afforestation and reforestation especially in plantation forestry development (e.g. out-grower schemes and plantation development funds); Forest restoration in arid and semi-arid areas (e.g. for charcoal production and production of NWFPS); Management of forest plantations under out-grower and forest development schemes such as joint forest management; and management of productive natural forests (where there are commercial

products such as timber and NWFPs) but this is in very limited areas where there are community forests with secure tenure rights and high value products.

60. Forest conservation is financed through community-based initiatives that contribute to community livelihoods and local economies such as ecotourism under programmes such as CAMPFIRE; small scale enterprises for processing timber and non-wood forest products including acquisition of appropriate technology; sustainable production of non-wood forest products albeit to a limited extent; protection of forests against fires and invasive alien species though limited to where these are direct threats to commercially valuable forest resources; strengthening of local institutions; tree growing and management for voluntary carbon markets; stakeholder participation and engagement in forest governance; participation in community/private sector partnerships; certification of production forest areas e.g. certification of honey producing areas in Western Zambia; technology transfer; and management for some environmental services (e.g. carbon).

61. Devolution and decentralization processes have been launched in almost all the countries in Africa. This has been driven in the last two decades by the growing promotion and adoption of decentralized approaches to natural resource management. This has seen a growth and proliferation of various forms of community-based forest management. Unfortunately decentralization and devolution have not been accompanied by systems for the mobilization and provision of the requisite resources (especially human and financial) to facilitate the efficient and effective functioning of the local institutions. Where revenue sharing schemes, between the central government and local institutions, have been put in place, the sharing is not based on the level of responsibilities but determined by the central government. There is need for equitable resource sharing mechanisms based on the level of effort and investment in forest resources management between government, local institutions and local forest managers. A good example is the benefit sharing system devised and implemented by the Oromiya Forestry and Wildlife Enterprise (OFWE) of Ethiopia where benefits are shared according to effort and investment into the management of jointly managed resources. This is going to be critical especially for the several carbon finance schemes and instruments such as REDD+.

62. Microfinance can contribute to some thematic areas that have been identified as major gaps in external financing through ODA. Examples include SFM outside protected areas; SFM in tropical production forests and forest restoration especially in arid and semi arid areas with low potential for commercial timber. In this regard the development of micro-finance in sustainable forest management should be undertaken in conjunction with the development of other sources of SFM finance especially public domestic and private sector finance.

63. While climate change funding presents new financing opportunities, its existing mechanisms are unlikely to address the full scope of financing needed for sustainable forest management. None of them has the capacity to finance all the activities implicit in the implementation of the forest instrument. The available funding from the existing funding mechanisms is inadequate for SFM mainly because of limitations in focus/scope, availability, accessibility, eligibility criteria and volume of finance. Trends in bilateral ODA show a decline in Africa's share of forest-related finance and a move away from sectoral to budgetary support and broader development strategies that respond to the MDGs. Many activities related to the

implementation of the forest instrument are expected to be executed by national forestry sectors and relevant agencies,²²⁶ but these tend to be accorded low priority by most developing countries and are not likely to receive adequate resources through this mechanism. Furthermore many governments in Africa continue to decentralize forest management responsibilities to the private sector and local communities, among other stakeholders. Many issues identified in the forest instrument are related to the sustained provision of international public goods and services, which cannot be adequately financed through these two sectors.

3.5.3 Asia

64. Data from the FAO's FRA 2010 indicates that there are approximately 740 million hectares of forestland in Asia in 2010, totaling 18% of global forest area.²²⁷ The largest forest area is found in East Asia with 255 million hectares, followed by: Southeast Asia, Oceania (inclusive of Australia), South Asia, Western Asia and Central Asia.²²⁸

65. More than half of forestlands in the Asian region are found in China, Indonesia and Malaysia.²²⁹ As a whole, the region has experienced a net gain of forest between 2000 and 2010, due in large part to afforestation efforts in China despite the continued high rates of net loss in South and Southeast Asia.²³⁰ The FRA indicates that the area of forest designated for biodiversity conservation in Asia has increased significantly between 2000 and 2010, to just under 80 million hectares,²³¹ which poses significant implications for new and emerging forest-related financing such as carbon, PES or REDD+. In fact, a number of countries in this region have taken steps to establish and formalize forest carbon rights,²³² and almost 25% of forests are located in protected areas.²³³ The Asian region is considered quite active in national REDD+ strategy development, institutional capacity building and pilot projects.²³⁴

66. However, there are significant pressures on forests in Asia. Forestlands are sought by industries such as agriculture, palm oil and mining seeking to expand their activities.²³⁵ In addition, due to increasing urbanization and rising incomes, the wood products industry has grown significantly, with total imports increasing from USD 5.4 billion in 1990 to USD 20.6 billion in 2006.²³⁶ Companies in China, India and Malaysia are the dominant regional actors in the areas of furniture and construction, whereas Korea and Japan are characterized by the pulp and paper industry.²³⁷

²²⁶ UNFF, Report of the Seventh Session (2007).

²²⁷ FAO, State of the World's Forests (2011).

²²⁸ Ibid.

²²⁹ Billy Cheng and Sophie Le Clue, Forestry in Asia (2010).

²³⁰ FRA, Global Forest Resource Assessment (2010).

²³¹ Ibid.

²³² FAO, State of the World's Forests (2011).

²³³ FRA, Global Forest Resource Assessment (2010).

²³⁴ Billy Cheng and Sophie Le Clue, Forestry in Asia (2010).

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Ibid.

67. Analyses indicate that “investment in the Asian forestry sector is particularly sensitive due to significant ESG issues and consequent exposure and reputational and financial risks.”²³⁸ ESG refers to those environmental, social and governance issues such as tenure and ownership rights. A number of international banks such as ANZ Bank, Citigroup, Credit Suisse, HSBC and Standard Chartered Bank have adopted in-house policies related to forests, including support of certification by the Forest Stewardship Council and legal logging activities, as well as bans on clients that ‘significantly convert or degrade a critical habitat.’²³⁹

68. The Asia Forest Partnership expresses concerns about SFM being “chronically underfunded in the region, particularly in developing countries.”²⁴⁰ A multi-faceted approach mobilizing, in addition to ODA, a variety of funding sources and mechanisms is needed, particularly for those arid and semi-arid countries that are not the main recipients of forest ODA.

3.6 Data Gaps

69. Initial explanation of the lack of national data, in particular national data on forest financing, was provided in chapter 1. The assessment of the existing scale of funding invested in the forest sector and other major thematic areas with relevance to forests revealed the general lack of reliable data. This echoes the findings of earlier studies on forest sector financing. A limited number of countries, organizations and programmes incorporate all data on the programming, sourcing, allocation and disbursement of forest sector expenditure. But overall, the paucity of information is a major barrier to improved understanding of the true costs associated with the management of all types of forests and the potential for forests to contribute to local, national and regional development.

70. In particular, the paucity of reliable data on national level expenditures on issues related to forest law enforcement and forest governance and the limited analysis of the efficiency and effectiveness of forest sector expenditure in general give cause for concern. There is a clear need for improved data on public expenditure in the forest sector as a means to understand the existing relationship between national needs to provide comprehensive processes and the actual levels of expenditure. Key issues are:

- i. Incomplete data coverage – geographically, sectorally and thematically;
- ii. Lack of clarity concerning attribution of funds to specific topics;
- iii. The potential for double counting of funds; and
- iv. Inconsistencies between funds committed and disbursed.

71. Without clear estimates of funding requirements it is difficult to gauge the level of funding needed overall or the magnitude of any gap. In the short term there is the opportunity to gather information on an *ad hoc* basis, however a much more regular, systematic and comprehensive approach is needed if geographic, thematic and temporal gaps are to be avoided.

²³⁸ Ibid., Page 116.

²³⁹ Ibid., Page 118.

²⁴⁰ Asia Forest Partnership, Phase 1 Assessment and Recommendations for Phase 2 (2007).

72. Working to fill the gap in information and knowledge concerning forests and their financial and economic opportunities must be a priority for countries and also for donors. This needs to reflect national situations and also take into account the full multifunctional range of contributions that forests can make to national development.

3.7 Environmentally Sound Technology and Governance

73. There is an extremely important relationship between financing and the use of appropriate environmentally sound technologies, as well as the need for training and education of those using the technologies. There is also the need to increase the broader understanding and support of the public as the implementers of sustainable forest management.

74. Environmentally sound technology (EST) plays an important role in managing forests in a socially, environmentally and economically sound manner. These technologies include, among others, remote sensing and geographic information system (GIS) technologies, pulp and paper technology, bioenergy production technology and biotechnology development for a wide range of forest products, including non-wood products.

75. There are a number of needs involved in the transfer of environmentally sound technologies, including: (1) securing financial resources, (2) building institutional and policy structures, (3) building the capacity of human resources and (4) opening access to information on environmentally sound technologies and knowledge for sustainable forest management. Oftentimes inadequate support for research and development, together with insufficient outreach programmes involving the private sector and local communities, inappropriate regulations favoring short-term profits over long-term sustainability, and unfavorable land tenure regimes, become constraints on the application and transfer of environmentally sound technologies.

76. There is a new atmosphere of support for the full engagement and participation of stakeholders, including local communities, the private sector, indigenous groups, youth and women as primary managers and users of forests and forest products, in the exchange of knowledge, information, research, experiences and innovative practices related to sustainable forest management. Such engagement can contribute greatly to the development and long-term application of environmentally sound technologies based on traditional knowledge. Business and private sector industries can provide assistance in addressing the competitiveness of environmentally sound technologies in industrial applications. Strong cooperation and collaboration among countries can also lead to positive exchanges of experiences, lessons learned and scientific, technical and technological knowledge for sustainable forest management.

77. The demonstration of good governance both within and outside the forest sector is a key factor for creating a climate of long-term confidence and credibility. Law enforcement is one of the essential functions of governments that can be impeded by a number of factors including a flawed policy and legal framework and minimal law enforcement capacity in producer countries, insufficient information about forest resources and illegal operations and high demand for cheap timber.

78. Although tropical countries have often received the keenest of attention, it is increasingly clear that many countries face challenges to improve governance and ensure better enforcement of forest laws. However, differences exist in countries' approach and capacity to address these issues.

79. Cooperation among countries is particularly beneficial to exchange experiences and knowledge on these matters, and where possible to assist each other on these matter through further expansion of the current cooperative programmes. Further analysis of country funding needs for forest law enforcement and governance is also needed. Funding for FLEG activities is crucial for ensuring sustainability and continuity of these activities and reforms at the national level.

3.8 LFCCs/ SIDS/ Trees Outside Forests

80. The previous 2008 AGF study found a gap in finance flows to LFCCs and small island developing states (SIDS).²⁴¹ This gap, among other factors, could be related to the extent of forest cover in these groups of countries, and also the small size of the SIDS.

81. In a UNFF study carried out by Indufor from March to August 2010, forest financing situations in 49 LFCCs and 38 SIDS were reviewed with the view of: (1) assessing present financing flows, (2) assessing demand for forest financing, (3) analyzing specific problems, challenges and opportunities; (4) identifying elements of an enabling environment to foster additional forest financing and (5) putting forward recommendations on all the above. The results of the study were discussed in four workshops. The discussions within these workshops identified the major obstacles, challenges and opportunities as well as important conclusions and recommendations for improving forest financing situation in these countries.²⁴²

82. The most glaring conclusion – valid for both SIDS and LFCCs – is that cross-sectoral data are simply unavailable. This preliminary observation confirms that not only do most forest financing stakeholders continue to work in “silos,” but that researchers and entities responsible for data collection and statistics have largely failed to take account of the linkages between sectors when building databanks. This has resulted in neglect of the contribution of forests to the economy, especially in terms of (1) food security (notably through agroforestry), (2) preventing soil erosion (and thus acting as a natural barrier against desertification) and (3) providing clean water (an extremely precious resource in many LFCCs).

²⁴¹ Markku Simula, *Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests* (2008), pp. 65, 73.

²⁴² By the time of finalization of the 2012 AGF Study on Forest Financing, three of four workshops were held in Tehran, Iran in November 2011, in Niamey, Niger in January 2012 (for LFCCs), and in Port of Spain, Trinidad and Tobago in April 2012 (for SIDS). The last workshop on SIDS will be held in July 2012 in Fiji. For further information, please see:

- Indufor, Background to forest financing in Low Forest Cover Countries (LFCCs) (Helsinki: Indufor).
- Indufor, Financing forests and sustainable forest management in Low Forest Cover Countries (LFCCs) (Helsinki: Indufor, 2010).
- Reports of Tehran, Niamey and Port of Spain workshops at: <http://www.un.org/esa/forests/facilitative-process.html>

83. Forests face intense competition with other land uses. At the policy level, forests are rarely given priority above other sectors, as over half of LFCCs do not have an official forest policy document. Among the challenges a majority of the LFCCs and SIDS face are: (1) limited capacity (in technical, financial and human terms) as well as weak coordination among government agencies in LFCCs responsible for managing forests; (2) lack of knowledge and awareness on forests among non-specialist decision-makers, particularly on the full range of forest values and their contribution to rural livelihoods, national economies and economic and social development; and (3) low levels of communication between forest specialists and decision-makers or the wider public on the importance forests, and of financing and implementing SFM.

84. While there are some examples of PES in SIDS, none of the LFCCs with explicit forest policies have indicated PES as a potential source of forest financing. Accordingly, only a handful of PES schemes have been implemented in LFCCs. Likewise, the potential of carbon financing, including through REDD+, is not perceived as significant by these national actors.

85. A recent study by UNFF²⁴³ suggests that the forests and trees in LFCC inevitably become a multi- and cross-sectoral issue due to the distinct properties of forestry in Low Forest Cover Countries (LFCC), such as limited forest cover, high dependence of rural population on forest and tree-related products and non-wood forest products, as well as challenges from desertification and soil degradation.

86. The assessment of Poverty Reduction Strategy Papers (PRSP) of the LFCCs undertaken for this study showed that environmental and biodiversity issues linked to forests are absent in many PRSPs and national strategies. Considering the significance of forests in watershed management together with the climatic conditions in LFCCs, surprisingly few countries mention forest in the context of watershed management in their PRSPs. Forests, desertification, biodiversity and climate change adaptation are very much interconnected in LFCCs, but countries have not been able to generate overall integrated policies, strategies and action plans linking these sectors properly. A multi-sectoral approach is a key in these countries to ensuring continued provision of ecosystem services by forests and trees to meet the demands of local and global populations. Therefore, it is important that national policies and strategies related to forests, particularly the financing strategies, emphasize the need for inter-sectoral coordination. This could further increase financial contributions to SFM out of biodiversity or climate finance flows from national or international sources. PRSPs are specifically designed for addressing one issue while not considering other elements that impact poverty, among which are forests and forest financing.

87. Given the limitations of the commercial timber sector in most SIDS, with a few notable exceptions there is a strong need to reach out to other sectors that present promising forest financing opportunities. These include the establishment of payments for ecosystem services (“Fiji Water” being a prime example), climate change (especially as sea-level rise poses a very real threat to many low-lying SIDS) and above all the tourism industry.

²⁴³ Indufor, Financing forests and sustainable forest management in Low Forest Cover Countries (LFCCs) (2010).

88. Beyond this, the full range of forest products and services needs to be recognized, which would not only allow additional cross-sectoral linkages and sources of financing to be identified but it would also increase the visibility of forests in the national agenda and highlight their contribution to national economies.

89. Dry forests, trees outside of forests and agroforestry still constitute major gaps as they have failed to attract the same level of financing as other types of forests, notably tropical rainforests. Accordingly, a large number of smaller countries are left without significant ODA support for forests and SFM activities. Results from the UNFF study on forest financing in low forest cover countries²⁴⁴ show that in many cases the limited allocation of budget resources to the forest sector in these countries can be attributed – at least in part – to the sector’s failure to make a convincing case for an increased share of resources.

90. In some regions like Africa, the landscape is increasingly becoming a mosaic of patches of intact forests interspersed with farms with trees. Forests continue to be lost, but more trees continue to appear on farms. The potential for smallholder farmers to increase investments in trees and forests is seen as rising quickly. Income from carbon trade will provide an additional incentive if properly harnessed.

Conclusions

91. The above review shows that there are huge financing needs for addressing climate change mitigation and adaptation, biodiversity conservation and land degradation. It is important to recognize that there is a substantial overlap between these investments and other financing needs for these purposes in forests. In the context of carbon financing this overlap is referred to as co-benefits. In the context of SFM, climate and biodiversity benefits are part of the multiple forest management objectives. In the context of land restoration, forest interventions also result in wood and NWFP production, new habitats for biodiversity, etc. There is also a significant level of overlap among administrative and transaction costs of various financing mechanisms, which are being implemented or planned. Adding up various sectoral estimates is therefore not possible without analysis of the overlaps and synergies and implementation.

92. The majority of forest related conservation finance from ODA and multilateral sources is currently flowing towards protected area expansion and management. While protected areas are crucial for the preservation of forests, forest ecosystems do not respect political and administrative boundaries, and therefore larger scale commitment and finance are necessary to protect forest biodiversity outside protected areas. Efforts are now being made to mainstream biodiversity into productive landscapes.

93. Over the last several years, many national initiatives (particularly those in donor countries), joint and regional initiatives and international organizations, as well as other global forest-related financing initiatives, have strongly focused on climate change. Other aspects are also indirectly linked with climate change, including issues related to forest law enforcement, restoration of forests and degraded lands, and biodiversity. Only minor consideration has been given to sustainable forest management, which seems to be a global trend.

²⁴⁴ Ibid.

94. Both developed and developing countries are facing multiple challenges that put huge pressure on them to address multiple competing priorities, with limited resources. For developing countries, the situation is more serious. In many countries, clear policies for allocating public funding to forests are lacking. When policies exist, these are weak and unreliable, resulting in significant gaps between estimated resource needs and actual funding allocated. Expenditures on forests are largely pegged at a holding or maintenance level and do not provide for forest development, conservation and management.

95. Actual investments of new forest-related financing, with a few exceptions, have a narrow scope and are relatively small. This may result in a considerable gap between the demand and the actual availability of finance for the sustainable management of forests. To access more financing, the trend is to involve other organizations, particularly from the private sector, in the formulation and implementation of funds and projects.

96. There is not yet a fully operational mechanism at the global level to capture emissions reductions from avoided deforestation and forest degradation.²⁴⁵ There is not yet an agreement in place under the UNFCCC in part due to outstanding concerns over financing and whether it will be market-based, fund-based or some combination²⁴⁶ or whether the system will involve tradable credits.²⁴⁷ Even with the highly anticipated agreement, there would be an inherent lag in implementation of three to five years for organizational work, capacity-building and rule-setting. But it is worth acknowledging the potential of REDD+ if integrated with regional, national or international carbon trading mechanisms.^{248,249}

97. Market mechanisms can mobilize a significant part of the identified gap for REDD+; however, an internationally agreed carbon market mechanism is likely to be necessary if the required financial resources are to be raised from private sources.

98. A mature and fully elaborated carbon market mechanism still is not in place, and its development at a larger scale requires further substantive policy and regulatory measures as well as vast capacity building efforts, if such mechanisms are expected to perform efficiently at the global level. Lack of full operationalization of carbon market mechanisms reduces the potential of associated financing. As the focus of these mechanisms is mainly on the carbon value of forests and not all functions of forests, and since these mechanisms are not in place, it is premature to assess their impacts on financing of a full range of forest activities.

99. Another concern about forest financing, as well as international financing in general, lies primarily in the lack of access to a systematic and comprehensive database of information on forest financing. This problem persists due to the sheer number of sources and the diversity of specific requirements to access those funds.²⁵⁰ These funding-driven programmes can result in

²⁴⁵ UNEP FI, *REDDy Set Grow Part I*, (May 2011), p. 7.

²⁴⁶ FAO, "State of the World's Forests 2011" (2011), p. 62.

²⁴⁷ UNEP FI, *REDDy Set Grow Part I*, (2011), p. 7.

²⁴⁸ Cooper, G., ed. "Sustainable Forestry Funds 2011-2012" (2011), p. 27.

²⁴⁹ Forum for the Future. "Forest Investment Review" (2009), p. 16.

²⁵⁰ Mr. Yetti Rusli, representative of the Government of Indonesia, presentation at UNFF AHEG1, Nairobi, Kenya, September 2011.

gaps between programme design and actual needs, as well as duplications across the board. Other issues relate to delays in implementation due to the extensive design and negotiation processes, as well as the complexities of the budgetary regulations.

100. Smallholders and natural forest management received less finance than large producers, plantations and protected areas. There is a strong need for improving the capacity of different stakeholders in various fields including in relation to governance and forest law enforcement, and in promoting technology cooperation at different levels. This will strengthen the ability of various stakeholders to take advantage of the existing opportunities for forest financing.

101. While the efforts of initiatives such as the REDD+ Partnership's Voluntary REDD+ Database (VRD) have provided increased clarity on international REDD+-related funding, there is a need to improve the reliability of the data and increase the coverage to a wider range of forest themes contained in the forest instrument.

102. It appears that countries have difficulty differentiating financing associated with different issues and sectors related to forests such as forest biodiversity financing. To address this problem and to have better information on financing, appropriate guidelines and templates should be developed to help countries report more clearly on forest financing, associated to other issues and sectors.

103. Improving forest financing in LFCCs and SIDS requires a strategic approach to the full potential of forests and inclusion of cross-sectoral, cross-institutional policies that embrace all values of forests including land management, agriculture, water, energy, climate and the environment.

CHAPTER 4: BARRIERS TO SUSTAINABLE FINANCING FOR FORESTS

Introduction

1. The importance of forests for achieving sustainable development goals at all levels has become increasingly apparent. In particular, forests play a fundamental role in ensuring natural resources supply, livelihood development and food security, and in preventing and mitigating global challenges such as climate change, drought, poverty, environmental degradation and biodiversity loss. Despite these significant contributions, the monetized values of forests seldom include the socio-economic value of the full range of ecosystem services and goods. Moreover, data showing such values is not available for most forest ecosystems.

2. A variety of challenges endanger the long-term sustainability and beneficial use and management of forests. The recognition of forests' critical importance in some quarters, such as in the finance and investment communities and amongst government officials, remains low. This has resulted in a relatively minimal level of priority on the management, conservation and sustainable development of all types of forests by decision makers, as well as too few financial mechanisms and services for sustainable forest management (SFM) and conservation-related activities. Moreover, capacity constraints continue to pose challenges for those seeking improved SFM actions and outcomes in most developing countries.

3. The combination of low prioritization of forests and low capacity has contributed to and exacerbated another challenge: insufficient and/or inaccessible financial resources for forest related activities. This occurs in part because inadequate levels of financial resources are made available for SFM-related activities and because of limited access to and mobilization of existing financial resources.²⁵¹ While many factors limit the extent to which existing financial resources may be accessed, a weak enabling environment is typically the superseding cause.²⁵² This concept will recur throughout the remainder of this chapter.

4. As part of the Resolution on Forests for People, Livelihoods and Poverty Eradication, adopted during the ninth session of the United Nations Forum on Forests in early 2011, it was agreed that there is an urgent need to: *Work to identify the barriers for access, in particular by developing countries and countries with economies in transition, to financing and suggest ways to simplify relevant procedures and build the capacities of countries to remove them...*²⁵³

5. To this end, Chapter 4 addresses the above stated requirement by broadly elucidating the main barriers hindering access to and availability of sustained forest financing.

6. Most barriers are caused by weaknesses in the enabling environment – that is, the capacities and knowledge, policies, laws, institutional arrangements, human capacities, financial resources

²⁵¹ Boscolo, van Dijk and Savenije, Financing sustainable small-scale forestry – Policy issues and lessons from developing national forest financing strategies in Latin America (2010).

²⁵² The Global Mechanism, Integrated Financing Strategies – A comprehensive approach to resource mobilization at country level, (2011).

²⁵³ UNFF9 Resolution on Forests for People, Livelihoods and Poverty Eradication (2011). (E/2011/42; E/CN.18/2011/20).

and governance supporting SFM activities. Problems accessing or mobilizing existing funds also pose a major barrier. Low levels of capacity and knowledge about finance are part of a weak enabling environment.²⁵⁴ Poor understanding by the financing and investor communities of the risks and benefits associated with the forest sector are another part. Overly complex donor procedures, as well as conditions and funding windows explicitly or implicitly excluding forest related activities,²⁵⁵ are also elements of a weak enabling environment. By strengthening enabling environments, the forest sector's ability to mobilize financing and investment can be significantly improved.

7. This section identifies and examines the key barriers that impede access to financing for and investment in forest-related activities. The following thematic areas – essential elements of the enabling environment – are identified. Under each thematic area, related barriers are explored. The thematic areas include:

- i. Capacity and knowledge
- ii. Policy and legislative frameworks
- iii. Institutional frameworks
- iv. Markets and private sector mechanisms and instruments²⁵⁶

4.1 Capacity and Knowledge

8. Technical and technological capacity and knowledge about forest ecosystems and their services are generally inadequate, especially among key decision makers outside the traditional forestry sector. Knowledge about the natural capital and its linkages to sectoral development prospects and visions often remains general and lacks awareness of specific socio-economic values. This translates into poor knowledge of the feedback loops, causes and effects and returns on investments. Weak knowledge about the linkages to agriculture, construction, energy, finance, transport, labor and water often even results in investments detrimental to the delivery of the GOF and other forest related development goals.

9. Low priority is often given to forests by national governments because the forest sector has not adequately communicated the importance of forest-related products and services to achieving broader sustainable development goals. The business and finance sectors have a different culture and way of communicating from that of the forest sector²⁵⁷. The ability to communicate with them and with other sectors requires a range of capacities, such as communication and presentation skills, knowledge of business and finance vernacular and an ability to construct business and project proposals. Furthermore, communicating about the importance of forests requires information and data, for example economic improvement data or forestland condition and resource data, which can support and prove the messages about forests' relevance to economics and development. Generating such information and data requires not only capacity to carry out data collection, monitoring, evaluation and reporting, but also mechanisms, instruments and technologies for collecting and analyzing data.

²⁵⁴ Boscolo, van Dijk and Savenije (2010).

²⁵⁵ UNFF9 Report of the AHEG on Forest Financing (2010). (E/CN.18/2011/13).

²⁵⁶ The Global Mechanism, Integrated Financing Strategies for Sustainable Land Management (2008).

²⁵⁷ UNFF9 Report of the AHEG on Forest Financing (2010). (E/CN.18/2011/13).

10. Unfortunately, exactly the elements that are needed are exactly those missing in many developing country contexts – capacity and information. Developing capacity and generating data and information requires long-term and stable funding – funding that is unlikely to flow to forest-related activities until a better case is made for forests’ relevance to sustainable development. This explains why forests, despite their importance, remain a secondary priority in many countries, and why forest finance continues to be evasive. Chapter 5 provides examples of initiatives that have managed to successfully navigate the challenges associated with forest financing.

4.2 Policy and Legislative Frameworks

11. The forest sector is not widely understood as relevant to achieving sustainable development goals despite the Millennium Development Goal indicators including ‘extent of forest cover’ as a key indicator of progress towards achieving sustainable development.²⁵⁸ There is increasing understanding that long-term sustainability and availability of food and natural resources to support sustainable development will require the application of integrated landscape level management. Forests play a critical role in safeguarding overall landscape multi-functionality through weather regulation, flood control, soil stabilization and many more services.

12. Those working on forest-related issues have struggled to communicate effectively about the importance of forests for achieving landscape-level health and sustainable development to those outside the traditional forest sector. While this shortcoming is generally well recognized in the literature, the problem persists, in part due to communication gaps and differences in professional cultures and lexicons between those in the forest sector and those in other sectors, including the finance sector. It has been widely suggested that the root of the problem lies in the lack of consistent and verifiable monetary values on many of the goods and services provided by forests.^{259,260} A multitude of research projects and case studies have attempted to provide calculations, particularly applicable in local or regional contexts, some with strong success. Nevertheless, there remains a lack of widely accepted data in many resource areas.²⁶¹ This shortage of data and information prevents decision makers, particularly in the Ministries of Finance and Planning, from viewing forests as contributors to the achievement of overall sustainable development goals, particularly when compared with other sectors whose contribution to alleviation of hunger, poverty and other needs is better measured and understood.

13. One particularly detrimental consequence is that when degradation of forest related resources occurs, most countries have no mechanism in place to ensure that this depreciation in natural capital is accounted for in national accounts. Costs associated with reductions in forest quality are externalized and excluded from assessments of wealth and economic condition.

²⁵⁸ See: UN MDG Indicators official website.

²⁵⁹ UNFF9 Report of the AHEG on Forest Financing (2010). (E/CN.18/2011/13).

²⁶⁰ Ibid.

²⁶¹ For example, the NFP Facility/FAO supported a study which reflected on a number of examples, entitled ‘Practical experiences of compensation mechanisms for water services provided by forests in Central America and the Caribbean’ (2010).

14. The forest sector in some countries continues to struggle with developing and implementing coherent strategies for sector planning. As a result, policy goals and priorities developed for forestry are often poorly aligned with the goals and priorities of other related sectors and with broader sustainable development strategies. Moreover, forest sector dialogues and policy strategies often fail to consider the financial resources that will be needed to carry out the policy strategies. As a result, many forest policy action plans and strategies remain theoretical or technical documents rather than being implemented as part of broader forest sector action plans.²⁶²

15. In many countries, the limited allocation of budget resources to the forest sector can be attributed to the sector's failure to make a convincing case for an increased share of resources. This is also largely due to the fact that most national accounting systems do not capture the full contribution of forests to the national economy, especially as forest benefits occur mostly in the informal sector. This leads to an undervaluing of forests in favor of other sectors, such as agriculture and animal husbandry. In particular, the non-wood forest sector has grown rapidly in recent years but also largely operates in the informal sector. A key consequence is that very little revenue is collected from the sector by governments for re-investment into forest management.²⁶³

16. Significant forest governance and legality challenges undermine efforts to mobilize forest related finance and investment due to heightened concerns about investment and financing risk. This increased risk acts as a disincentive to financing by jeopardizing the intended project outcomes (in the case of donors) or by threatening return on investment (in the case of investors/financiers). Governance challenges are the result of several factors, including:

- i. Absence of forest policies and legal frameworks;
- ii. Inherently flawed or poorly implemented or enforced forest policies and legal frameworks; and
- iii. Uncertain and/or insecure forest tenure, particularly in light of the inherent duality that exists between legal and customary rights.

17. Under such conditions, illegal activities such as illegal logging, transport, processing and trade may more readily proliferate. Institutional capacities may not be strong enough nor resources sufficient to enable law enforcement to contend with increasing illegal forest resource harvesting. Perverse incentives may arise from ineffective policies and laws that actually drive unsustainable forest resource exploitation, deforestation and/or ecological degradation. Monitoring of illegal activities and of changes in forest condition is typically difficult or impossible due to lack of high quality and comprehensive information and data on forest resources.

²⁶² Nordheim-Larsen and Walter, The Paris Declaration and its implication on finance for sustainable forest management, (2009).

²⁶³ Peter Gondo, Financing Sustainable Forest Management in Africa: An overview of the current situation and experiences (2010).

18. An informal sector often exists where governance is weak and/or where there are barriers to entering the formal sector, such as a lack of financial services like bank accounts and lending tools. An informal sector may also emerge if permits and/or licenses are prohibitively expensive or where there is a lack of laws or regulations governing the harvesting, production and sale of certain products (or the exclusion of certain products from existing laws and regulations). Many individuals who operate in the informal sector are micro, small and medium entrepreneurs carrying out harvesting, production and trade of non-wood forest products, fuel wood and charcoal.

19. Recently, timber procurement policies (TPPs) have emerged as potentially positive instruments for promoting greater legality and sustainability in timber harvesting and trade. But they have been difficult to implement because many TPPs involve time-consuming processes with complex and controversial criteria for meeting often-unrealistic targets. As a result, TPPs may have inadvertently become an additional disincentive to private investment in SFM.

20. Insufficient public sector fiscal policies can discourage private sector investment and may drive unsustainable forest management practices. Well-designed fiscal policies such as tax relief, subsidies or eased market access can stimulate private sector investment in SFM-related activities. A lack of such incentives often creates barriers to investment because investors and finance providers may be reticent to invest in areas or projects requiring large up-front investments. For example, in many areas, infrastructure such as roads and public services is non-existent or in need of significant upgrading. Investments into infrastructural improvements can drive up the costs and/or risks of doing business, raising questions among potential investors about cost effectiveness and financial returns.

21. By making various types of financial incentives available to investors, the public sector can overcome many such obstacles and stimulate greater investment in SFM-related activities. Provision of incentives may be more economically sound in the long run for governments themselves. This is because the application of strict regulations for land use or purchase and the management of protected public areas can be a costly undertaking for governments. On the other hand, providing financial incentives to the private sector to manage forestlands sustainably may cost governments upfront, but will generally bring long-term economic improvements to countries.²⁶⁴

22. Public sector fiscal mechanisms can also stimulate SFM behaviors by providing tax relief or subsidy payments to land owners and users who manage their forestlands sustainably. Market prices for timber and other forest-derived resources rarely reflect the actual costs associated with the production of those resources. In other cases, no economic value at all is currently attached to many of the resources and services provided by forests, despite their many social, ecological and cultural values. By imposing a heavy tax burden or failing to put in place incentive payment programmes, the public sector may cause forest owners and users to harvest forest resources unsustainably, or to convert forestlands to alternative, more lucrative land uses. Ultimately this leads to a vicious cycle with regard to accessing financing because over time the

²⁶⁴ Bowles, Downes, Clark and Gurin-McManus, *Economic incentives and legal tools for private sector conservation*, (1998).

forest resources become increasingly degraded, leaving less natural capital available for investment.

23. Existing legal mechanisms may be flawed, poorly implemented or under-enforced. This may be due to insufficient funding, human resources, information or political will to design well-crafted laws or to permit monitoring and enforcement activities to be carried out. The legal mechanisms discussed below represent those that hamper financing and investment in SFM most severely.

24. Fiscal Policies: While well designed public sector incentives such as tax relief and subsidies can drive investment into forest related activities, poorly designed fiscal mechanisms can, on the other hand, disincentivize investment through high taxes that discourage forest related activities and/or products, or through tax breaks and subsidies provided to activities and products that compete with those of the forest sector. Fiscal policies can also create perverse incentives to overexploit and degrade forest resources, which leads to added costs for governments because the government pays twice – once in the form of the tax break or subsidy and then again later to resolve the negative consequence of that activity, for instance, through forest restoration activities.²⁶⁵

25. Forest tenure: When state recognized (as opposed to ‘traditional’) forestland ownership and/or access rights are weak, there is little incentive for land and resource users to manage and safeguard forests and related resources (e.g. timber, carbon, NWFPs, etc.) for the long term. This makes returns on investment and provision of finance inherently insecure.²⁶⁶ Banks and other financial providers are usually unwilling to provide financing to investors or to forest users when tenure is not secure, due to concerns about not receiving repayment should access to the forest and related resources be lost. Finally, donors also frequently have concerns about putting financial resources into projects to improve forestland condition where tenure is not secure because there is a chance that local people may lose that land once it becomes a tempting target for ‘land-grabbing’ by those with greater political power.²⁶⁷

26. Continued forest tenure insecurity may be one of the biggest drivers of continuing chronic poverty and food insecurity for those living in forest dependent communities. This problem is especially large for women and Indigenous Peoples who are typically least able to obtain secure tenure as they often face discrimination in laws pertaining to inheritance and land ownership.

27. Another particularly pressing concern currently receiving attention relates to the mechanisms by which funds are to be delivered under various carbon sequestration schemes. There is significant concern about how local people who often lack secure tenure are to be included programmes such as REDD+ and others, which are likely to require ownership of trees for those wishing to receive payments for the carbon sequestered by those trees.

²⁶⁵ Ibid.

²⁶⁶ Boscolo, van Dijk and Savenije, Financing sustainable small-scale forestry – Policy issues and lessons from developing national forest financing strategies in Latin America (2010).

²⁶⁷ International Fund for Agricultural Development, Land Tenure (2007).

4.3 Institutional Frameworks

28. Local and sub-national forest stakeholders are critical groups for determining the health and condition of forests and the resources therein; yet sizable challenges frequently stop financing flows from reaching these stakeholders. Local and sub-national actors, including forest smallholders, forest-dependent communities, Indigenous Peoples, local/sub-national government officials and others living in or near forests, often rely on those forests for a broad range of goods and services including food, medicines, construction materials, employment, enterprise development opportunities and cultural refuges.

29. Their forest management decisions and actions (often referred to as community forestry or community-based forest management) play a major role in determining the condition and sustainability of forests – and have the potential to make substantial contributions to achieving sustainable development goals. Nevertheless, local people are frequently unable to access and secure the financing needed for enterprise development, SFM and capacity development activities. Moreover, there are challenges associated with channeling funds from public and private sector investors, and through multi-lateral and bi-lateral entities, to those at local and sub-national levels. This challenge is multiplied by recent trends towards devolution and decentralization of forest management responsibilities, as well as associated funding by national governments to local governments and communities.

30. As discussed previously, secure forestland and resource tenure – e.g. clear and sustained rights to access the natural resource base²⁶⁸ – is often a pre-condition for ability to access finance and investment. Local people face a variety of other challenges that can act as impediments to obtaining funds, including:

- i. Isolation in locations far from population centers, markets and service providers;
- ii. Poor transportation infrastructure;
- iii. Lack of bargaining and political power;
- iv. Lack of access to communications technologies, e.g. mobile telephones, Internet;
- v. Underdeveloped capacities for business and management activities;
- vi. Policies and/or regulations biased towards large scale operators;
- vii. Complex and frequently changing policies or regulations;
- viii. Poor market information; and
- ix. Inadequate technical assistance.²⁶⁹

31. While these challenges are considerable, they are surmountable. Local and sub-national social and professional groups that focus on organizing forest stakeholders into cooperatives, collaboratives and the like can combat the challenges faced by local people effectively. This is

²⁶⁸ Wagner, Grouwels and Schweitzer-Meins, Forging linkages: The case of Forest Connect as a small-scale forest enterprise development network tool (2011).

²⁶⁹ Auren and Krassowska, Small and medium forestry enterprises in Uganda: How can they be profitable, sustainable and poverty reducing? (2003).

because such groups can enable local people to learn from one another, gain improved access to information and technical resources and develop capacity-building opportunities that would not have been possible separately. Additionally, organizing together enables local people to develop more robust and unified voices in sub-national, national, regional and international policymaking platforms and dialogues,²⁷⁰ as well as in the marketplace.²⁷¹

32. Finally, by organizing together, local forest actors can often access financing opportunities such as loans more readily,²⁷² and can create avenues for soft investors to channel funds specifically towards meeting local-level development priorities and needs. However, soft and long-term investment into the development of stronger local and sub-national organizations is lacking. Local stakeholders in many countries remain un-organized and continue to face many of the above-mentioned challenges and barriers to accessing finance.

33. SFM remains a relatively low priority at the national level in many countries due to a lack of understanding among the public and government officials about the importance of forests for achieving sectoral and national sustainable development goals. This has significant implications for forest financing because of national level governments' position as the 'first door' of finance.²⁷³ It is national level governments that coordinate flows of money from internal sources (e.g. tax revenues) and external sources (ODA and other donor funds) via domestic budgets and donor allocation modalities. Even when funds devolve to regional or local actors, the thematic prioritization of those funds often begins at the national level.²⁷⁴ When government does not prioritize SFM and does not mainstream strategies for integrating SFM goals into broader sustainable development strategies, SFM-related activities often receive smaller domestic budget allocations. There are also likely to be significant barriers to accessing ODA and other donor funds.²⁷⁵

34. This second point has to do with efforts by international donors and institutions to better align their financial support with country level priorities. Such efforts are both necessary and admirable, however a possible outcome is that SFM related activities may receive less support from ODA and other donor funding if SFM is not among countries' top development priorities.

35. The limited publically available funding for SFM is exacerbated because responsibilities and focal points for forest matters and international forest-related agreements and instruments are scattered among various agencies and ministries. Overlaps in responsibilities and

²⁷⁰ Boscolo, van Dijk and Savenije, Financing sustainable small-scale forestry – Policy issues and lessons from developing national forest financing strategies (2010).

²⁷¹ Macqueen, et al., Working together: forest-linked small and medium enterprise associations and collective action (2006).

²⁷² Y. Kamara, Existing and potential forest financing mechanisms for smallholders and community forestry in West Africa (2011).

²⁷³ The Global Mechanism, Integrated Financing Strategies – A comprehensive approach to resource mobilization at country level (2011).

²⁷⁴ Jones Kamugisha-Ruhombe, Scoping for on-going activities in support of implementation of the facilitative process (2012).

²⁷⁵ Nordheim-Larsen and Walter, The Paris Declaration and its implication on finance for sustainable forest management (2009).

agendas often lead to stiff competition between agencies and ministries for funding and for designation as focal point institutions for international forest-related agreements. Overlaps also lead to duplication of efforts and poorly designed projects, to excessive bureaucratic processes and delays in release of funds, and to miscommunication and poor coordination. Such problems could be mitigated by mainstreaming of forest financing and investment strategies.

36. A related challenge concerning national domestic budgets is in the utilization of budget ceilings, a policy instrument used to set financial limits on the amount of money in the budget that may be allocated for forest related activities. These caps typically are set by the Ministries of Finance to demonstrate macro-economic stability and qualify for debt relief. This prevents countries from allocating higher levels of funding for forest related activities, even if funds become available internally or externally, they would be unable to do so if such amounts exceeded the budget ceilings established for forest related activities.²⁷⁶

37. The international community, including all relevant supranational actors (regional, international, etc.), provides important financial support for SFM related activities around the globe. However, problems associated with eligibility, extensive procedural requirements and coordination of priorities can create barriers to access and delivery of forest financing. Numerous efforts, such as the Paris Declaration on Aid Effectiveness (2005), the Accra Agenda for Action (2008) and the Busan Partnership for Effective Development Cooperation (2011) have tried to improve delivery, alignment and efficacy of donor financing. Problems continue however, as the result of a complex suite of challenges. A deeper discussion follows on some of the most difficult issues facing funding recipients and donor entities.

4.4 Barriers to External Public Funding

38. Forest financing eligibility and pre-approval procedures: Eligibility criteria are often narrowly defined which means that only a select few stakeholders and/or countries fit the requirements to be considered as recipients. Countries with low forest volumes or SFM projects that are high quality but that do not fit within tightly defined parameters may be ineligible to receive donor forest financing. This can lead to certain areas, countries or types of projects getting large amounts of investment – at times to the point of oversaturation – while others cannot meet basic financing needs. Many projects related to carbon sequestration and climate change mitigation have focused on forested areas of the tropics, while insufficient financing has been channeled into supporting restoration of arid and dry-land forests despite these forests' importance for combating desertification and providing a range of other economic, social and environmental benefits.²⁷⁷

39. An additional challenge for potential forest financing recipients is that donor application procedures can be highly complex and rigid, requiring a lot of information, a high level of detail and in some cases multiple submissions. The time involved in getting approval for a project, from project identification, to project formulations to actual approval and delivery of funds can be lengthy. Such long processing times can unravel cooperation among stakeholders or

²⁷⁶ Ruhombe Kamugisha-Jones, Mobilising and channeling forest finance in heavily indebted poor countries (HIPC) – Case study of Uganda (2009).

²⁷⁷ Sergio Zelaya, Synergies – An opportunity to increase forest financing (2011).

undermine a project in need of urgent action. Procedures can impose bureaucratic barriers that are insurmountable for potential recipient stakeholders and governments, and many important projects go unfunded or unimplemented.

40. The reason for setting up daunting procedures is a need on the part of the donor entities to ensure that money is spent well. Donors will be responsible for reporting how their funds are spent to their taxpayers (in the case of bi-laterals) or to their oversight/steering committees/boards (in the case of regional organizations and multi-laterals). The inherent tension exists in how to ensure that high quality and pertinent projects are funded, while also considering that there are limited windows of opportunity, capacity limitations, and potentially high personnel and financial costs associated with the application process. These costs will be borne by the potential financing recipient who will have an overall ‘expectation of reasonableness’.

41. Finally, many donors require forest financing recipients to provide counterpart financing from other sources and/or from their own operating budgets. These requirements are intended to promote funding recipient ownership in and sustainability of projects.²⁷⁸ While they can be successful instruments for accomplishing this goal, they can also cause the most impoverished potential recipients to be barred from participating in financing schemes, as the potential recipient may simply be unable to contribute counterpart funding. If counterpart funding requirements are not formulated and applied carefully and flexibly, financing could be skewed towards wealthier and/or higher capacity communities where matching funds can be mobilized more readily.²⁷⁹

42. Donor reporting requirements: Donors generally require a great deal of information about the work-plan, progress, outputs, outcomes and expenditures of projects for which they provide funding. Such information can allow donors to make changes in project design and timing; gives them information about the effectiveness of the project; and provides them with the information they need to justify financial disbursements. Funders do need to take care in the designing of reporting requirements, and should maintain a certain level of flexibility to allow for differences in capacity and circumstance.

43. Currently, reporting requirements vary widely from donor to donor, leading to financing recipients having to devote much more sizeable amounts of personnel time to meeting reporting requirements. As much as is possible, donors should work to align their procedures with one another (in the case of multiple funders being involved in a project or country) and with national governments’ existing budget cycles²⁸⁰ and technical reporting processes.

44. Financing recipients often face delays in the delivery of donor provided funds. Delays can occur because of systemic inefficiencies and problems with country financial services; however, another common cause of delay occurs when reports are submitted late or not at all. Financing installments are often attached to the successful submission of technical and financial reports from financing recipients. If reporting requirements are unduly heavy, complex or

²⁷⁸ Braimah and Obeng Nti, Community Response to the Counterpart Funding Policy in Poverty Reduction Projects in Ghana (2006).

²⁷⁹ Wathne and Hedger, What does an effective multilateral donor look like? (2010).

²⁸⁰ Ibid.

additional to other donors' requirements, financing recipients may have a hard time meeting the requirements, and therefore fail to meet the conditions for receiving funding installments.

45. Alternatively, reporting requirements may be reasonable but if capacities are low and resources are not invested into training and technical assistance for financing recipients, they may still fail to meet reporting obligations. If the bureaucratic burden placed on a recipient is inappropriately tailored to it, high quality projects can stall out.²⁸¹

46. Coordination of priorities: Duplication of efforts occurs in many countries, primarily due to a lack of alignment and harmonization between international donor priorities, and between national and international priorities. The international actors each have their own unique mandates and priorities, while recipient countries, regions and sub-national actors may have different priorities and stakeholders to whom they must respond (e.g. taxpayers, voters, etc.). Harmonization and alignment through platforms like the national forest programmes has not occurred sufficiently. Additionally, unproductive competition between donors and a lack of sustainability in many projects relates to the lack of coordination among donors.²⁸²

4.5 Private Sector and Market Mechanisms and Instruments

47. Sustainable forest related activities can be perceived as high-risk by investors and providers of finance because financial returns are long-term and dependent on uncertain and variable factors. On the other hand, forest investments have several inherent characteristics that make them attractive for investors who seek long-term sustained returns, reduced volatility against inflation and portfolio diversification. While investors are likely to have concerns generally with investing in countries in which enabling conditions are weak, forest-related activities are often perceived as particularly high-risk because trees take time to grow and mature. Climactic conditions, land tenure arrangements, legal and enforcement systems and political stability can change over time, making it difficult for investors to predict financial returns. Furthermore, SFM activities require access to remote areas, detailed information about the landscape and its resources, technically proficient in-country partners and well-designed 'bankable' projects.²⁸³ If infrastructure, data and information and human resource capacity in a country is lacking, the private sector will lack not only the ability to assure investors about future enabling conditions, but also the basic information about the forest needed to estimate value and earnings. These factors often stop investors and institutions from investing in or supporting SFM-related projects.

48. Where enabling conditions are relatively strong and likely to remain so, the forest sector still often faces problems acquiring financing.²⁸⁴ While economists have proven that forest-related investments often do generate strong returns in the long run,²⁸⁵ this is not well known or understood by many of those in the private investment sector accustomed to realizing

²⁸¹ Ibid.

²⁸² UNFF9 Report of the AHEG on Forest Financing (2010). (E/CN.18/2011/13).

²⁸³ Boscolo, van Dijk and Savenije, Financing sustainable small-scale forestry – Policy issues and lessons from developing national forest financing strategies in Latin America (2010).

²⁸⁴ Markku Simula, Financing Flows and Needs to Implement the Non-Legally Binding Instrument on All Types of Forests (2008).

²⁸⁵ K. Zobrist, Economically sustainable working forests: Financial analysis principles and applications (2005).

returns on investment quickly. The forest sector and the investment and financing sector do not understand one another well. Each has its own unique culture, terminology, operational procedures and paces.

49. A striking result of this is that international banks, regional development banks, microfinance institutions and other financial institutions rarely have services tailored to the forest sector. The loans provided by financing institutions typically carry conditions on loan repayment timeframes, but investments in SFM-related activities tend to realize returns on a longer timeframe than those in other sectors. This makes the financing mechanisms inappropriate for and unresponsive to the specific needs of the forest sector. Moreover, financial guarantees are needed to obtain to such loans, yet forests are rarely considered an acceptable form of collateral.²⁸⁶

50. Accessing financial services and markets can be especially challenging for small and medium forest enterprises (SMFEs) and forest smallholders. They are frequently located in remote, rural areas difficult for financial and technical service providers and institutions to reach and where there is a smaller client base. The small scale of most business operators there can also make transaction costs per customer too high to be profitable. As a result, service providers, many of whom could provide important technical and financial advice and be a source of potential loans and grants for SMFEs and forest smallholders, are few and far between in rural areas. Their remote geographic location also means that SMFEs and smallholders are often far from larger markets at which they might be able to sell their goods at higher prices. Many SMFEs and forest smallholders selling their goods to middle-men at vastly reduced prices. Overall, their isolation means that SMFEs and smallholders are often unable to realize a high degree of profitability and growth. In addition, many of the forest businesses lack the type of business management that is commonplace in other sectors such as irregular or unclear ownership, lax accounting and imprecise business planning in many companies are just too unclear and un-organized to be able to match modern business and financial norms.

51. Relatively isolated SMFEs and forest smallholders lack access to information about market pricing of forest products. Many are poorly educated and lack business and financial management, project development, silviculture and organizational development skills. Likewise, local and regional forest department staff who would be the most likely sources of technical support to forest-based entrepreneurs and smallholders may also face capacity challenges, particularly related to enterprise development and marketing. SMFEs and forest smallholder are, consequently, often ill-equipped to meet some of the preconditions for accessing financing from the formal sector. These preconditions include the ability to develop viable business proposals and undergo the usually complex process of becoming legally constituted (as opposed to remaining part of the informal sector).²⁸⁷

52. Another precondition – the ability to provide collateral – also presents significant difficulties for SMFEs and forest smallholders seeking financing, since most financing institutions do not accept forestlands as collateral. Moreover, especially problematic for SMFEs

²⁸⁶ Boscolo, van Dijk and Savenije, Financing sustainable small-scale forestry – Policy issues and lessons from developing national forest financing strategies in Latin America (2010).

²⁸⁷ K. Canby, “Investing in natural tropical forest industries” (2006).

and forest smallholders is the issue of land tenure. Many SMFEs and forest smallholders have rights to forestland and/or resources through customary agreements rather than through state sanctioned ownership. This creates issues of tenure insecurity and often makes these actors nearly ineligible for financing from the formal sector. An exception occurs in the provision of micro-finance because some finance institutions, as well as NGOs and other formal and informal associations, have begun to provide small, short-term loans and micro-insurance and do not necessarily require completely secure tenure. However, the forest sector competes with others such as those involved in trade activities, which have low start-up costs and short turnover periods. Competition is fierce as the money available is inadequate to meet the demand. Once again, the slow return on initial investment makes forest-related activities a tough 'sell,' and only a few loans make it to SMFEs and forest smallholders.²⁸⁸

53. Finally, people in rural, forested areas may sometimes be afraid of approaching banks and other financial institutions because they perceive such entities as unapproachable and powerful. Accessibility of microfinance services has to do with both access barriers, such as distance and availability, but also social barriers such as disempowerment (particularly among women) and cultural and religious factors.²⁸⁹

54. Community forestry cooperatives and other group enterprise alliances are one effective way of driving improvements, as they can minimize the challenges associated with SMFEs and forest smallholders and other local forest stakeholders being at too small a scale to access financing or compete in the marketplace. Furthermore, such groups have the potential to create joint capacity development and learning opportunities and to improve the political leverage of members by unifying many disparate utterances into one louder and articulated voice.²⁹⁰ Unfortunately, many regions lack these kinds of strong cooperatives or similar networks that can help SMFEs and forest smallholders overcome their unique challenges.

55. A variety of private sector mechanisms have been tried in various contexts over the years. Some of the most promising and innovative of these are self-organized private deals, such as ecosystem service arrangements between land users and off-site beneficiaries, and products/services eco-labeling and certification schemes.²⁹¹ More information about the many types of market-oriented mechanisms available, and the opportunities provided by them, are presented in detail in Chapter 2.

56. Market-oriented mechanisms intended to encourage SFM are not sufficiently used and mainstreamed.²⁹² This is mostly the result of either a lack of available market tools and compensation schemes, or more often a lack of knowledge about the many options available to forest and investment actors. This is problematic because, as with public incentives, such reward systems play an important role in encouraging forest-related actions that benefit forest landowners and society overall. Additionally, market tools have the potential to provide forest

²⁸⁸ Y. Kamara, Existing and potential forest financing mechanisms for smallholders and community forestry in West Africa (2011).

²⁸⁹ FAO, 'Microfinance and forest-based small-scale enterprises,' FAO Forestry Paper 146 (Rome, Italy: 2005).

²⁹⁰ Grouwels and Schweitzer Meins, Empowering communities through forest partnerships (2011).

²⁹¹ The Global Mechanism, Integrated Financing Strategies for Sustainable Land Management (2011).

²⁹² Nordheim-Larsen and Walter, The Paris Declaration and its implication on finance for sustainable forest management (2009).

landowners and society with economically sound options for keeping forests in forested condition instead of converting them to other uses. Without such innovative market tools, the pressure to convert forests to land uses more profitable in the short term can be too great and can lead to potentially irreversible forestland loss. A low level of knowledge about these options, coupled with limited capacities for applying many available market tools, amongst forest and land agency officials, forest landowners and users, investors and finance providers and other relevant stakeholders, has led to a lack of widespread implementation and utilization.

Conclusions

57. A mix of barriers stands in the way of consistent and sufficient flows of financing and investment for forest-related activities. While availability of funds is of course essential, many of the challenges facing the forest community have more to do with finance mobilization.

58. Those attempting to gain or improve access to forest finance often find themselves first having to grapple with issues ranging from governance to capacity to politics, among others. These experiences show that the mobilization of finance occurs as a gradual process. It requires coordinated efforts to improve the enabling environment on multiple fronts simultaneously.

59. A strong enabling environment is essential for leveraging public and private financing for forests. Creation of such an enabling environment requires, among others, undertaking a wide range of policy, regulatory and institutional measures to improve governance at all levels.

60. Fostering a supportive and enabling environment for forest finance mobilization must be a priority of policy makers at all levels, from local to international, to ensure buy-in and commitment among those with the power to affect systemic change. Without such commitment from leaders, countries may not have the necessary infrastructure and capacity to absorb financing and investment. When funds do flow into countries, financing recipients may find themselves overwhelmed by external demands made upon what is likely to be already limited time and resources if there is not a clear sense of ownership over processes and projects.

61. The entry points for resource mobilization differ from one place to another, and the tools and approaches that work in one setting will not necessarily be appropriate for another. For example, the sources and types of financing available to high forest cover countries is likely to vary somewhat from those available to low forest cover countries. Furthermore, SFM goals and intended use of forests varies from place to place, with some prioritizing, for example, conservation, while others focus more on production forestry. Conducting a broad analysis of the financial situation, needs and goals in an area of interest (often referred to as an integrated financing strategy or a forest finance strategy) can be a useful – some would say necessary – exercise for potential financing recipients, donors and investors. It can enhance understanding of the particular needs and constraints of a specific place and its people. It can provide the insights and information needed for all concerned to determine the best mix of financial tools, mechanisms and sources.

62. Looking to the future, it is important to keep in mind that no single solution can eliminate the various barriers that exist to the mobilization of forest financing. In light of this, efforts

should concentrate on thoroughly examining the needs and contexts of each place and its people, developing a long-term strategy that is context appropriate and politically viable, and continuing step-by-step actions to improve the enabling environment within countries and regions.

CHAPTER 5: SUCCESSFUL COUNTRY EXAMPLES AND INITIATIVES²⁹³

Introduction

1. Increasingly, governments, businesses, communities and individuals are realizing that investing in forests in creative ways can help to achieve major public policy and financial goals. New and innovative ways of augmenting financial sources are emerging, particularly by adopting strategies that make forestry more relevant to people and socio-economic progress. Some countries have successfully articulated how SFM contributes to a wide array of broader development objectives and priorities: from poverty eradication and provision of safe drinking water to climate change mitigation and adaptation.

2. Important policy changes have enabled greater involvement of diverse stakeholders and helped the forest sector attract funds to address issues such as bio-energy development, ecotourism, health and rural employment. Significant efforts have also been made to promote forest co-operatives, tree-grower federations and self-help groups to mobilize additional resources. Some countries have pioneered initiatives that focused on proactively recognizing and enhancing the economic values of forest products and services. These approaches can increase the economic viability of forestry enterprise by creating and supporting a level playing field for the forest sector *vis-a-vis* other sectors. Other innovative strategies adopted include the establishment of dedicated “forest development funds” and promoting new alliances to leverage funding.

3. This chapter presents case studies of forest finance from around the world that give policy makers and forest practitioners examples of how countries are addressing the funding challenges as well as insights on the way forward. These examples are drawn from the knowledge and experiences of CPF members as well as those deeply involved in augmenting financial resources for SFM. In selecting these case studies, we sought to identify:

- i. A broad cross-section of examples across a variety of forest types and ecosystems from among developing countries, illustrating management for diverse objectives and under different ownership arrangements;
- ii. Examples at different scales – global, regional and local community experiences that provide learning opportunities for others; and
- iii. Examples showcasing innovation – initiatives that are out of the ordinary and that display promise for the future.

4. This chapter includes just a few case studies for illustrative purposes but does not claim to cover all success stories. This chapter can inspire practitioners and all people, but it does not endorse any particular approach or policy.

5. Section 2 below presents an overview of the common elements at the core of the approaches adopted in the case studies. The underlying factors of motivation and success are analyzed in Section 3. Section 4 contains key messages from the case studies. Brief summaries of case studies included in the review are presented at the end.

²⁹³ The Case Studies are presented in Annex II.

5.1. Common Elements that Underpin Countries' Active Interest and Investment in Forests

6. This section reviews the common themes in approaches adopted by countries to augment resources for forestry. The review reflects the increasing sophistication with which governments, businesses and communities now consider funding issues for forestry. The approaches include: combating land degradation through massive afforestation in China; mitigating climate change through reduced deforestation in Indonesia; encouraging conservation through payments for ecosystem services in Brazil and Mexico; and formulating joint management strategies with communities in Africa. In any case study, however, there is always a combination of strategies applied in various degrees. The key lies in identifying the appropriate mix that best suits a particular situation.

5.1.1 Turning Crises into Opportunities

7. With climate change gaining increasing attention, and as the impacts of ecosystem degradation begin to hit home, it has become ever more clear to many countries that augmenting forest resources is an essential part of securing a nation's future. In most countries, political leaders and policy makers face challenges to ensure that their countries' ecological systems continue to meet the food, fodder, fuel, health and wellbeing needs of their populations in a sustainable manner. Increasing political attention is being paid to supporting forests, as their degradation means that countries will have to spend more in the future.

8. In particular, there are several instances where crises or conflicts have been turned into opportunities that benefit forests. The Great Green Wall (**Case study-1**) initiative to stop Sahel desertification, for example, is seen as a pinnacle of international effort to address a problem of global proportion. The initiative, involving eleven African countries and their international partners, aims to build a living green wall of trees and bushes – 15 km wide and up to 8,000 km long – from Djibouti in the Horn of Africa in the east, all the way across the continent to Dakar, Senegal, in the west. Similarly in China, a severe drought in 1997 and devastating floods along the Yangtze River spurred the government to initiate the Sloping Land Conversion Program (**Case study-2**). With a goal of converting 14.67 million hectares of cropland to forestland involving tens of millions of rural households and a budget over USD 40 billion, it has been hailed as one of the largest programmes of its kind.²⁹⁴ Likewise, Mexico's Payments for Hydrological Services program, which provides monetary incentives to landowners to maintain forest cover in critical watersheds, was established primarily in response to severe drought conditions and water scarcity. The initiative has received acclaim from all key stakeholders, from the Mexican Congress to local communities, as a successful strategy.

9. Perhaps no other activity besides forestry can address climate change in the short-term while at the same time providing a commercial product. Investing in forestry also has the double advantage of improving the livelihoods of local communities and ensuring food security through improved forest management. Having recognized the seriousness of this issue, the Indonesian government (**Case study-3**) has been taking important steps to arrest deforestation and forest

²⁹⁴ M.T. Bennet and J. Xu, China's Sloping Land Conversion Program: Institutional Innovation or Business as Usual? (2005).

degradation and to rehabilitate vital forest ecosystems in partnership with various bi-lateral and multi-lateral organizations. Indonesia has even enacted a regulation on REDD+ and developed implementation procedures, thus becoming the first country to establish rules governing the sharing of REDD+ based revenues.²⁹⁵

10. The recent global financial crisis has also presented unique opportunities for giving a major thrust to the forest sector. A number of countries (e.g., China and Chile) have included job creation in forestry as an integral part of their economic recovery plans.

5.1.2 Proactively Engaging Forestry in Poverty Alleviation and Rural Development

11. More than 1.6 billion people worldwide rely on forests for their livelihoods, and the poorest of the poor, particularly women, are often the most forest-dependent. Forest products and services are important for these disadvantaged groups to generate both subsistence and cash income and also to serve as safety nets during critical periods.²⁹⁶ Therefore, any degradation of these resources will have the most direct negative effects on these people. Recognizing these implications, a few countries have satisfactorily integrated forestry into poverty reduction and rural employment strategies. For example, the National Rural Employment Guarantee Act of India, being implemented at an estimated cost of about USD 6 to 8 billion a year, guarantees 100 days of employment to rural populations (**Case study-4**).²⁹⁷ Besides acting as a major source of investment for forestry, thus benefiting the landless poor, the programme is said to have also helped prevent potential civil unrest in some areas.

12. Rebuilding the natural resource base in rural areas is seen by many countries as a major step in moving towards greener, more equitable and sustainable economies. Forestry requires, relative to other interventions, less capital and other inputs and is adaptable to local conditions and capacities. Besides creating resilient economies, the enhanced natural resource base and wealth can lead to new enterprises and infrastructure in villages.²⁹⁸ Income earned through forestry employment stimulates further production and employment (a multiplier effect). Acknowledging these potential benefits, many countries are actively promoting small-scale and community forest enterprises. The empowerment of women engaged in the Shea sector in Burkina Faso, for example, is considered an exemplary case of a community-based forest enterprise through its unique approach to addressing, in a sustainable way, several issues. These include successfully helping community members earn substantial income through processing and export of Shea butter and promoting women's empowerment in the region (**Case study-5**).

13. Given that major drivers of forest degradation such as mining and infrastructure development result in considerable loss of livelihoods to local people, a few governments have established policies to compensate them. Often these are grant-type financing for SFM from large national and international corporations such as dam, energy and mining companies.

²⁹⁵ See:

http://forestclimatecenter.org/document_details.php?cnt=International&lang=English&cat=Regulation%20on%20REDD%20in%20Indonesia

²⁹⁶ C.K. Sreedharan and J.R. Matta, Poverty alleviation as a pathway to sustainable forest management (2010).

²⁹⁷ See: <http://www.nrega.nic.in/netnrega/home.aspx>

²⁹⁸ J.R. Matta, The forest sector in the context of green economy in Africa (2011).

Successful approaches to raising public-sector/ODA finance by governments also focus on activities that deliver significant environmental service benefits to broader sections of society. Forests located in upper catchments and along riverbanks, wildlife sanctuaries, nature reserves, and other ecologically critical areas for watershed protection and biodiversity conservation feature in this category. While some initiatives focus on “compensating” affected people for the “forgone” benefits, others encourage development of alternative livelihoods such as the Community Markets for Conservation (COMACO) in Zambia (**Case study-6**). COMACO is a novel initiative pioneering innovative ways of conserving habitat while reducing poverty and hunger among the many thousands of poor farmers who share the Luangwa Valley with elephants and other wildlife.

5.1.3 Creating and Reinforcing a Level Playing Field for the Forest Sector

14. If nature did not provide the services provided by forest ecosystems, we would need to spend billions of dollars to accomplish what ecosystems do for free – if we were able to replace them at all. Yet, over 60% of ecosystem functions around the world are being degraded faster than they can recover (MEA 2005). Therefore, for better stewardship of these resources and services, fiscal instruments are needed that can encourage conservation and reward sound management. A number of countries and organizations have established and encouraged payments for ecosystem services (PES). Payments to protect watersheds, biodiversity and landscape beauty are becoming more widespread, with the linkages between buyers (e.g. governments, local bodies, NGOs, philanthropists) and sellers (forest owners, protectors) becoming institutionalized. The objective of these efforts is to ensure that the trade in forest ecosystem services reflects their true values, and the managers/owners of forests receive appropriate compensation/reward for their efforts.²⁹⁹

15. PES are increasingly gaining importance across the globe, with hundreds of transactions involving substantial amounts of money, aided by various national, regional and international policies and programmes. Since 1992, a number of Brazilian states have redistributed a portion of revenue raised through value-added tax to municipalities as a means of compensating them for maintaining protected areas within their territories (**Case study-7**). Growing evidence suggests that this sharing mechanism has also acted as an incentive to set aside new areas for conservation and improve management of existing areas in many states. Applying the principle at a different scale, the Mexican government launched the Payments for Hydrological Services program that is often considered as one of the largest programmes of its kind in the world (**Case study-8**). A fee is charged to large non-agricultural water users to pay forest owners to protect natural forests thus creating a link between the providers of environmental services (land stewards) and those who benefit from them (water consumers).

16. Although Latin America is very often profiled in international forums for extensive application of PES, these strategies are also becoming popular in other parts of the world. Prominent examples of PES for watershed services in the Asia Pacific region include compensation payments by the Korea Water Resources Corporation to Korea Forest Service; payments to farmers in catchments by Fiji Water in Fiji; similar payments by private water

²⁹⁹ J.R. Matta and J. Kerr, Can compensation for environmental services sustain collaborative forest management? (2006).

companies in Cidanau and Lombok region in Indonesia; and by hydro power projects in the upstream areas of Wochu, Phobjikha and Yakpogang rivers in Bhutan. Cambodia's Seima Biodiversity Conservation Area project, where local people protect bird nests and help conserve endangered species and Viet Nam's Lam Dong Forest Protection and Development Fund, which helps local people earn money from ecotourism, are other examples of biodiversity-related PES. Similarly, initiatives such as the Kenya-based Kasigua Corridor REDD+ project (**Case study-9**) and the Oddar Meanchey REDD+ Project in Cambodia have received international prominence as pioneers in generating income from carbon markets. The essential message from these approaches is integration of the true value of ecosystem services into policy and business decision-making processes.

17. Establishing a level-playing field for the forest sector also entails removal of perverse incentives that lead to the conversion of forestlands to other land uses.³⁰⁰ However, significant examples of such policy interventions are yet to be noticed in any developing country.

5.1.4 Paving the Way for Enhanced Private Sector Investments in Forests

18. Emerging changes in global financing trends and the new wave of economic liberalization are providing new impetus for increased private sector participation in forestry.

19. Seizing these new developments, many governments have started to help shape new markets and investments to promote forestry. Investments in tropical forests face high industry and country risk, which increase the rate of return expected by investors. Countries are helping such investors through insurance support,³⁰¹ price and purchase guarantees, and also by promoting public-private and private-private partnerships. The objectives of these measures include reducing upfront establishment costs, providing liquidity, and mitigating risk and uncertainty. Risk insurance mechanisms are often developed in cooperation with investment banks and integrated into national financial services. To improve financing for small-scale forestry in Guatemala, for instance, forest and financing stakeholders are pursuing instruments such as: microcredit; repurchase agreements; and securitization of forest-based cash flows. They have also succeeded in establishing a Forest Finance Intelligence Unit (Unidad de Inteligencia Financiera Forestal) to promote these efforts (**Case study-10**).

20. Countries are also using direct incentives such as cost-sharing, provision of technical and other material inputs, and credit at subsidized rates to encourage investments. There is also a reassessment of existing instruments to improve their effectiveness (e.g. Reforestation Fund in Indonesia, Green Bond in Malaysia, Grants-in-Aid for Greening India). Some are helping investors defray other costs through import subsidies and tax breaks. Transnational investments are encouraged, especially in logging, plantation development and wood processing by suitably modifying import tariffs. Incentive mechanisms are a strong tool to direct investments to a specific geographical area (degraded or ecologically sensitive areas), population group (small and marginal farmers) or forest activity (agro-forestry, industrial processing).

³⁰⁰ R.M. Martin, Deforestation, land use change and REDD (2008).

³⁰¹ For example, a substantial part of the insurance premium is met by public sources in Guatemala.

21. The forest farmer and company partnerships such as out-grower schemes (**Case study-11**) are evolving rapidly, often strongly supported by national policies and programmes. New forms of instruments and capital market investments are emerging, which enable the landowners, for example, through forest-backed securitization of investments, to monetize their investment and enhance their income.

5.1.5 Establishing Innovative Institutional Mechanisms

22. The kinds of institutional strategies nations apply to support forestry vary widely³⁰² and range from simple regulatory measures³⁰³ to highly complex systems such as the cap and trade system. An innovative mechanism that is increasingly gaining popularity is the portfolio approach. This can involve key bilateral, multilateral and domestic institutions and a variety of instruments, including grants and credits. It also opens up avenues for raising financial resources from a variety of actors to meet diverse objectives, besides enabling national governments and donors to use relatively small amounts of their finance to guide large private investments. Such an approach can also facilitate integration of alternative tenure and business models for PES, especially for multiple benefits (carbon, water and biodiversity), known as bundling.

23. With these objectives in mind, many governments have established dedicated national “forest funds” or “environmental funds” such as the Amazon Fund in Brazil, Lam Dong Forest Protection and Development Fund in Viet Nam, and FONAFIFO in Costa Rica (**Case study-12**). These “dedicated funds,” in their most basic form, are designed to set aside a portion of revenues and funding for forestry. Unlike the traditional mechanisms, they exist for more than a single government budget cycle and offer some flexibility in spending. Starting from this basic model, there are many variations. They often receive earmarked taxes in addition to donations, bilateral and multilateral aid. For example, Fiji created a share in government Trust Funds for local communities and proposed collection of a certain portion of income tax. Many countries were successful at marketing these national funds as viable and sustainable institutional mechanisms and garnering sizable amounts of money from both domestic and international investors and donors interested in the notion of a triple bottom line – financial, social and environmental. There are also many such funds or endowments operating outside governments’ purview. Establishing partnerships between donors and recipients is also facilitated by platforms such as the CBD’s LifeWeb Initiative (**Case study-13**).

24. The complexities involved in effectively absorbing, managing, using and building upon existing investments include synergizing the three core aspects of a fund design: income sources, uses and oversight. For example, more complex funds have independent institutional structures, such as a separate agency to administer or a separate advisory board. In some instances, the institution administering the fund is partially or fully autonomous, functioning as a corporation or trust. Some funds provide co-ordination at the national level and allow decentralized spending

³⁰² A major political party in India, for example, made it mandatory to plant a tree to renew annual party membership.

<http://www.indianexpress.com/news/want-to-join-nitishs-party-turn-a-new-leaf-literally/897139/>

³⁰³ For example, China's top legislative body, the National People's Congress, passed a resolution making it the duty of every citizen over age 11 to plant at least three saplings every year.

<http://muddygreen.com.au/index.php/2011/12/the-great-green-wall-of-china/>

at local levels. The key lies in designing funds tailored to the problems at hand and targeting them strategically to appropriate points of intervention, as witnessed in Bhutan (**Case study-14**).

5.2 Underlying Factors of Motivation and Success

25. The review of some successful cases of forest finance suggests significant diversity in the dimensions of their uniqueness and popularity. This is expected. However, there are also compelling commonalities. Certainly, features such as strong political support; good systems of governance; efficient, robust and flexible implementation capacities; and well-defined community involvement are common to all of them. Several other core elements emerge as underlying conditions that need to be present for a financing approach to achieve a real and meaningful impact. These factors are briefly discussed below.

5.2.1 Strong Political Leadership and Support of Government at the Highest Levels

26. As has been evidenced in all the case studies, the forest sector needs to gain the attention and support of political leadership at the highest level. Political strategies endeavor to bring about major changes in financing and investment through legitimate negotiations, coalition building, persuasion and influencing. Implementing these strategies mostly depends on identifying and targeting relevant policymakers, organizations and the media; use of persuasive rationales and tactics specific to each audience; and creating a public debate to enhance the public profile and political significance of forests (e.g. Great Green Wall case study). In shaping a change, these approaches emphasize what is “good” for society from a pluralistic view that hinges on ethics, equity, fairness, or sometimes culture and heritage (e.g. Bhutan). This seems to be particularly important given that it is difficult to measure and report forests’ contribution to societal welfare in an economic sense as many countries struggle to collect even the most basic data on forests.

27. Many places where forestry is not a competitive land use in a financial sense are in countries where the world would like to see the most progress towards SFM. Furthermore, the greatest ability to fund forests is mostly found outside these countries (as seen in REDD+ and biodiversity conservation focused case studies). Thus political approaches could be the key to highlighting the global commons benefits of forests and harnessing ODA and other international/donor support.

28. The growing demand for forest products and the resultant economic opportunities for promoting forestry and forest product-based industries (e.g., China, Vietnam, Burkina Faso), particularly in rural areas, triggered major attitudinal changes at the highest levels of government to understand the long-term value of forests. In some cases (e.g., India, Mexico and Vietnam) investments in forests could also be said to have received increased attention to assuage potential peasant movements or political unrest.

29. These examples clearly demonstrate that public funding for forests can increase when the benefits of forests are strongly linked to broader development goals such as poverty alleviation.

They also highlight the need for aligning forest policies with other political priorities and opening them up for wider consultation and review.³⁰⁴

5.2.2 Good Governance Systems

30. All the cases reviewed here demonstrate the critical importance of good governance. Good governance is observed to improve the efficiency and effectiveness of policy initiatives, including ensuring opportunities for justice and fairness at each stage of the process. While good governance systems include the establishment and maintenance of appropriate procedures and institutions, the case studies underscored the following features:

- i. Well-defined property rights and other mechanisms to resource security;
- ii. Enhanced accountability and transparency in management;
- iii. Codes, standards and other mechanisms that reduce risk and uncertainty;
- iv. Built-in systems of rewards and punishments that promote positive behavior; and
- v. Adequate means and provisions to address equity and fairness.

31. Indonesia's example particularly shows that improved governance is a prerequisite for accessing finance. Besides playing a pivotal role in the smooth operation of the transactions and in the efficient management and integration of capital flows, it reduces business risk. Good governance frameworks are also needed to enable the development of sustainable markets, particularly to facilitate monitoring and enforcement of rules, and ensure investor protection. As has been evidenced in case studies involving PES mechanisms, well defined property rights are also a pre-requisite for the private sector, local communities and smallholders.

5.2.3 Efficient and Robust yet Flexible Implementation Capacities

32. Many case studies underline the need for requisite knowledge, skills and good administrative traits. Honest, efficient and effective administration that uses money effectively and that makes a convincing case for investment is essential to win the confidence of investors. The case studies from Latin America as well as COMACO and Bhutan particularly emphasize the importance of enabling factors such as:

- i. Availability of timely and reliable data on forest resources and their contributions to society;
- ii. An inherent ability to engage other sectors, particularly the finance sector, and to engage top levels of administration;
- iii. Adequate knowledge of finance language, instruments and processes, and a strong inclination to innovate and adapt new finance instruments and mechanisms; and
- iv. Creation of appropriate multi-stakeholder platforms and institutional structures that allow mainstreaming the forest sector into national planning and policy making.

³⁰⁴ Pauli et al, Natural capital: The new political imperative (2010).

33. Lack of these skills and capacities is perhaps one of the reasons why forest-based PES continues to be scattered and small scale in many regions. While uncertainties about these markets and their benefits remain a constraint to the scaling-up of such deals, institutional capacities must be developed particularly to avail carbon sequestration benefits of forests. They include existing and upcoming funds managed by bilateral and multilateral agencies and international conventions. The forest agencies need to be aware of these resources and make sure that the national ministries responsible for availing these sources involve them (the case of Indonesia presents some of these implications). Such efforts could be the key to changing the current dynamics of returns on investment in favor of forests.

34. The fact that the ecosystem services provided by forests are often not valued or considered in decision-making is a key factor affecting their loss and degradation. Decision makers need to be made aware of the social and environmental importance of forest ecosystems and their potential contribution to other sectors such as energy and water through improved capacities and communication. New responses need to be pursued and renewed commitments need to be actively sought (The Mexican PSA-H exemplifies some of these efforts).

5.2.4 Strong Local Community Involvement

35. Finally, the case studies indicate that it is essential to actively involve the poor, marginalized peoples, indigenous communities and local governments in resource management and share with them the benefits of increased investments and incomes. Extensive community involvement helped enhance political support, assuage negative reactions, and scale up some initiatives (e.g. COMACO, Shea enterprise) in many cases. In the Indian case study, complementarity between rural employment and meeting critical environmental goals made investment in forests a logical solution to addressing the problem of poverty.

36. Also, as seen in the case studies of Brazil, Mexico, China, Guatemala and India, local communities were provided with strong incentives to assume greater responsibilities and make stronger commitments. Proactive policy incentives and institutional measures, such as formation of forest cooperatives and self-help groups and development of small and medium local enterprises, helped to provide a true benefit to these groups. Similarly, the REDD+ mechanisms in case study 3 (Indonesia) included specific safeguards to ensure the flow of benefits to those groups. Besides ensuring greater equity in resource access and benefits, the merits of such inclusive approaches included higher transparency, better matching of services to needs, greater mobilization of local knowledge, and increased accountability. Underlying many of these interventions is the slow emergence of a social consensus on how the forest sector should be managed and supported. To some degree this involved striking a balance on management objectives. The case study on out-growers schemes explains some of these challenges.

37. Ultimately, the number of people that forests helped out of poverty and drudgery seems a more powerful indicator to use when seeking funds than the extent of forest area managed.

Conclusions

38. The case studies presented in this chapter reveal successful accounts of leadership, dedication and innovation and can inspire and motivate others. The experiences gathered here also show that sustainable use and management of forest resources is fast gaining political and economic significance. Each of these examples builds upon a critical message: investing in forests can help achieve a number of public policy goals. These range from mitigating climate change to enhancing the resilience of agriculture to promoting energy security and providing jobs and a secure future for communities.

39. Inherent in these examples is also a message that opening the forest sector to a wider range of key actors and stakeholders benefits it in the long run. A shared vision among different actors on the roles, functions and methods of forest financing is needed at the national level. The concept of inclusiveness also recurs in all the case studies: Inclusive policies characterized by an ethic of equitable stewardship and benefit sharing to promote local community interest and active involvement in management. The case studies also show the need for appropriate modification of resource rights and entitlements to ensure enhanced benefits to communities striving for SFM at the grassroots.

40. There is a slow but significant change occurring in how forests are viewed and managed. Globally, it is changing from a dominant strategy of liquidating them to support other economic activities to managing them as a major means for achieving sustainable development. Significant economic, social and technological advancements, including enhanced awareness and communication (particularly of looming threats such as climate change), and global efforts are contributing to this transformation.

CHAPTER 6: STRENGTHENING FINANCING FOR FORESTS: THE WAY FORWARD

Introduction

1. The world has changed dramatically since 1992, politically, environmentally, economically, and in communication technology and culture. Changes towards open, inclusive governance and the availability of new information and communication technologies are coming together to provide possibilities for informed choices by policy makers, citizens, consumers and producers. Along with these changes the perceptions and the vision of forests have changed, and forest values and their contributions to sustainable development have become more visible. These changes provide opportunities for conserving and using forests as a key element for achieving the goals of sustainable development.
2. Significant progress has been made at the national, regional and international levels to enhance the contribution of forests to long-term sustainable development. There is better and wider understanding of sustainable forest management, and there is now agreement on the forest instrument as a comprehensive instrument on forests containing the four global forest objectives. In addition, forests have been integrated into the work of several multilateral environmental agreements.
3. The forest financing landscape has changed significantly in recent years as the result of emergence of the potential of forests to curb climate change. Huge flows of financing are now targeting climate change mitigation through reducing emissions from deforestation and forest degradation.
4. Progress has also been made in forest law enforcement, governance and related trade as well as in applying voluntary market-based mechanisms. The importance of forests for mitigating and adapting to climate change and for hosting the vast majority of terrestrial biodiversity, among other major functions, is increasingly acknowledged. Some countries provide good examples of how forests can become a centrepiece in this transition.
5. A new paradigm for international cooperation has emerged, encompassing south-south, triangular and north-south cooperation among governments and with the private sector. This paradigm harnesses existing abilities and builds capacities that take the perspectives and needs of developing countries increasingly into account.
6. Strengthening and improving access to existing and potential forest financing and investment would ensure that SFM activities can increasingly contribute to improving the economic, environmental and social development of countries around the globe. Adequate financial resources have been identified as critical to ensuring the widespread and effective implementation of the forest instrument.
7. The full value and range of forest goods and services needs to be recognized, including through payments for ecosystem services, so that these values may be internalized in GDP figures. This would raise the visibility of forests and include them more fully in the political

agenda. Sustainable forest management outside protected areas also generates global public goods, which need to be compensated.

8. In some cases the term “sustainable” in SFM has come to be interpreted as a focus on only the environmental benefits of forests. By developing more substantive data on the economic and social functions of forests, it is possible to increase the likelihood that payments for those goods and services will be addressed more effectively in country budgets and in leveraging both public and private financing.

9. Based on the findings and analyses in the previous chapters, this chapter provides some suggestions and proposals to improve access to forest financing to address needs and gaps, and proposes actions to strengthen financing for forests at the national, regional and international levels. These proposals apply to many countries, regardless of their degree of development. This chapter includes a review of the advantages and disadvantages of establishing a voluntary global forest fund and some suggestions and proposals on strengthening existing forest-related financing mechanisms and funding at the global level.

6.1 Strengthening Financing for Forests at the National Level

10. To strengthen and mobilize resources for forests at the national level, actions have to be taken to improve policy, legislative and institutional frameworks. It is also necessary to provide a platform for engagement of various stakeholders, including forest communities, smallholders, civil society, indigenous people and the private sector. The following are suggestions for mobilizing increased funding for forests that are emerging from initiatives at the sub-national, national, regional and international levels. While the following actions are proposed mainly for the national level, some are also relevant at the international level.

6.1.1 Strengthening National Policy and Legislative Frameworks

11. Strengthening policy and legislative frameworks will promote access to funds for forests. This can be done through the following measures:

- i. Emphasizing the forest sector’s role in supporting sustainable development goals by improving inventory data on forest goods and services, determining and consistently communicating their cross-sectoral monetary values and engaging in economic valuation assessments of forest ecosystem services and effectively communicating the results.
- ii. Replicating this work in assessing the economic and social values of forests.
- iii. Capturing the values of forest goods and services in national budgets and accounts by developing indicators and collecting data. Also, assessing forest related values in terms of ‘green gross domestic products,’ and paying attention to non-cash values, including exchanges of goods within rural areas.

- iv. Providing strong, consistent and open political support and capacity development for monitoring and law enforcement activities, to create enabling conditions for investment in SFM.
- v. Providing support to processes that build partnerships, promote dialog and strengthen the capacities of forest sector stakeholders at every level, in particular those at the local level who rely on forest resources most directly.
- vi. Targeting strategies, developing capacity and promoting knowledge sharing to improve mutual understanding between the forest sector, other sectors and the institutional financial system.
- vii. Adjusting agricultural and forest policies to promote the reciprocal relationship between forests and agriculture, for example agroforestry, and the role of forests in addressing poverty alleviation and food security, as well as the need for intensification of agriculture to avoid deforestation on a massive scale.
- viii. Clarifying land and resource tenure rights in land use and inheritance laws.
- ix. Incentivizing SFM through use of public sector fiscal policies, such as:
 - Providing financial resources, through budget allocations and earmarking of government taxes, for SFM activities to communities operating under customary forest ownership and use systems
 - Public payment schemes
 - Permanent or periodic conservation easements
 - Government co-financing and payments for investments in forest related activities
 - Subsidies or tax relief for carrying out SFM or for using green technologies, resource utilization, forest restoration and forest conservation activities, to make them financially feasible for community and private landowners
 - Concessional loans
- x. Regulating trading schemes such as tradable development rights.
- xi. Tradable emissions reductions or removals.

6.1.2 National Forest Financing Strategies

12. National forest financing strategies (NFFS) are effective means for mobilizing financial resources from all possible sources and supporting key activities necessary for sustainable forest management. NFFs should encompass the public and private sectors, the local, regional, national and international levels, and measures that are pursuant to the attainment of the objectives of the national forest programmes and forest management for the various target groups. It is also

important to ensure that the NFFS is implemented and enforced by competent national and/or regional institutions.

13. National forest financing strategies should be a part of the national forest programmes and should strengthen links to the finance sector. These strategies should work in a holistic fashion in two ways: (i) by capitalizing on the linkages with connected sectors and programme objectives (agriculture, water, energy and climate change for example) and (ii) recognizing the importance of trees outside forests and the reciprocal relationship between those and trees and forests. Since forests are addressed or impacted by multiple agencies of government (environment, agriculture and finance to name a few), it is critical to target more than the traditional forestry programmes for financial support. These strategies can be also utilized to promote coherence in implementation of various MEAs at the national level, by recognizing that other sectors and programmes need support as well. Cooperative approaches could catalyze more effective financing for all, including the joint preparation and implementation of the NFFS with the national resource mobilization strategies and investment frameworks supported by the CBD and CCD. To this end, it is important to:

- i. Develop a national forest financing strategy or action plan to map a way forward for accessing and attracting financial resources and investment into SFM as agreed by a broadly representative group of stakeholders from the forest sector as well as from other concerned sectors or institutions. When possible, build on existing national and/or sector processes, financing strategies and platforms.
- ii. Develop an equivalent strategy at the regional level.

6.1.3 National Fund

14. The development and incorporation of national forest funds into national forest programmes and forest policy and legislation is another effective option for addressing sector financing needs. This is a model followed by many countries, such as some African countries. The revenue for such funds could be derived from different sources, including government budgetary allocations, revenues generated from the sale of forest products and services, taxes, fees, fines and donations. However, different countries have different circumstances and so exact solutions can vary from country to country.

15. Decentralization of the funds or establishment of decentralized forest funds especially at the local authority level and community levels has also generated successful results for some countries. The major advantages of forest funds are that they help to meet long-term strategic forest investment and development plans and improve the predictability of available funds. However, their effectiveness depends on good governance, accountability, transparency and meeting sustainable development criteria.

6.1.4 Strengthening National Capacity and Institutions

16. National institutions are essential for mobilizing resources for forests and improving access to funds for forest activities. To strengthen the institutions, it is necessary to:

- i. Improve agency capacities related to cross-sectoral coordination and cooperation toward better communicating the benefits of forests.
- ii. Develop capacity to access funds including through capacity development in financial literacy, monitoring, reporting, data development and management, communication, partnership development and other relevant areas.
- iii. Encourage the use of the Framework for Assessing and Monitoring Forest Governance developed by FAO/PROFOR and PROFOR's work to promote data collection on forest sector public expenditure, so as to analyze gaps and opportunities for forests at the local and national levels.
- iv. Ensure that financial and technical resources are available for capacity development related to reporting and accountability activities. Also ensure that resources are set aside for the personnel time that will be required to meet donor reporting requirements.
- v. Strengthen and expand capacity building and other in-kind support from public and private funds at the local, national and regional levels.
- vi. Support local forest stakeholders and smallholders in the development of cooperatives, forest producer organizations and similar groups to enable group-lending practices, improve opportunities for capacity development and knowledge sharing to improve access to markets and to reduce transaction costs.

6.2 Strengthening Private Financing for Forests

17. The private sector has a critical role to shape the market and to generate financing for forests at the national and international levels. An enabling environment is key to encourage involvement of the private sector in increasing financing for forests. Such an environment requires providing policy and regulatory conditions in which the interests of investors and beneficiaries (both people and the environment) are respected and ensured. To this end, it is necessary to:

- i. Use public-private sector partnerships where public financing and investments ('soft investment') can mitigate potential risks for private investment ('hard investment') and ensure that private capital is used in a socially and environmentally responsible manner.
- ii. Ensure that loans, carbon market projects and other financing instruments are provided, possibly through the use of intermediaries, in tandem with capacity development focused on areas such as business planning, risk reduction and transaction costs.

- iii. Encourage capacity development activities on the reduction of risks and transaction costs.
- iv. Encourage financial institutions to provide forest owners and communities and private investors with appropriate lending tools. An example of one such tool is ‘warehouse receipt financing’ wherein producers are able to use their non-perishable agricultural/forest products as collateral for loans under conditions tightly controlled by the lending institution.
- v. Explore formal and informal financing opportunities such as micro finance and remittances, which could be channeled through forest owner organizations, cooperatives and producer groups.

6.3 Strengthening Forest Financing at the Regional and Global Levels

6.3.1 Regional level

18. Regional and sub-regional forest coordination and cooperation has been instrumental in mobilizing financial resources for forest management in some regions. The existing regional processes, organizations and commissions related to sustainable forest management can make a real difference in improving access of countries to financing. These processes include wide range of institutions and processes such as the CPF related regional institutions; UN regional commissions; regional development banks; regional processes in Europe, Latin America, Africa and Asia as well as thematic regional processes like the Tehran Process on LFCCs.

19. These organizations and processes have major leverage points for mobilizing funds for forests and can help their constituencies address sustainable forest management challenges in general, and financing forests in particular. They should:

- i. Strengthen inter-regional and intra-regional cooperation on forest financing by sharing relevant experience, knowledge and expertise.
- ii. Catalyze the preparation of national forest financing strategies and assist in the preparation of national audits on forest financing needs.
- iii. Explore forest finance opportunities with the private sector.
- iv. Assist countries in capacity building for developing forest financing initiatives and proposals, with a focus on working collaboratively to develop both single-country and multi-country proposals to donors for financing.
- v. Assist countries to establish a basis for productive cross-sectoral collaboration.

6.3.2 Strengthening the Implementation of the Forest Instrument

20. The forest instrument is the only globally agreed framework on forests that provides a comprehensive set of actions to promote the sustainable management of all types of forests at all levels. This instrument is the most comprehensive framework for SFM. Measures have to be taken to strengthen implementation of this instrument by countries around the globe. To this end, it is necessary to:

- i. Overcome the disconnect among different ministries such as those responsible for agriculture, energy, water, mining, transport and those ministries responsible for forests by raising awareness of a globally accepted framework for SFM, namely the forest instrument.
- ii. Enhance cross-sectoral cooperation on forests at the national level, by setting up inter-ministerial coordination committees for implementation of the forest instrument.
- iii. Mainstream implementation of this instrument in the programme of work of various forest-related financing mechanisms, organizations and initiatives.
- iv. Address the strengthening of the forest instrument by UNFF in 2015.
- v. Encourage reporting on the implementation of the forest instrument by countries, including by providing financing for the preparation of national reports to the UNFF, as well as for related pilot projects such as those currently underway in Ghana, Liberia, Nicaragua and the Philippines.
- vi. Use UNFF's newly developed reporting format to collect data, in particular on the areas where there are gaps in data such as quantifiable as well as qualitatively focused information on cross-sectoral forest financing.
- vii. Further expand the GEF SFM/REDD+ Strategy and agree on it as a new GEF focal area on forests during the next GEF replenishment (GEF6).

6.3.3 Strengthening Data Collection on Forest Finance

21. There is a clear need to strengthen national statistical data, as well as mechanisms and processes whose focus is collecting national data on forest financing, including in the implementation of the forest instrument. Countries' capacity to collect data and information on forest finance should be also strengthened.

22. The Rio conventions and other major global and regional mechanisms are closely interlinked in data collection on forest financing, and as such can help to collect data on forest finance. Coordination among these processes is also important to capture forest related financing investments and financing from other sectors such as tourism, wildlife and others.

23. A good example of this cooperative approach on reporting can be found in the UNCCD, which has similar tools under development for gathering information that can be useful to extract data on domestic flows of financing for the implementation of the forest instrument. These data, once available, will provide a more accurate picture of the flow of financing for implementation of the forest instrument.

24. The Development Assistance Committee of the OECD has monitored aid targeting the objectives of the Rio Conventions since 1998 through the Creditor Reporting System, using the "Rio markers." Given the importance of forests to achieving the objectives of all three of the Rio Conventions, consideration should be given to establishing a similar Marker for forest funding, addressing the forest instrument and the GOFs. However, the definition of the OECD on what is counted as "forestry" or "forests" needs to be significantly updated. "Forestry" does not currently capture the cross-sectoral, multi-functional contributions of forests or the institutional impacts on forests by other sectors.

25. The Collaborative Partnership on Forest's online Sourcebook, developed and maintained by FAO in collaboration with other CPF members, also provides a searchable database of funding sources, policies and delivery mechanisms. Similarly, the Convention on Biological Diversity and the Convention on Combating Desertification have online sourcebooks with information on funds and funding opportunities related to forests, biodiversity and sustainable land management.

26. More effective coordination of these efforts across the UN system would help countries to access this information, including by moving to innovative social and technological mediums to communicate this data. CPF member organizations could be specifically instrumental in collecting data on forest finance by designating lead agencies to collect specific data, according to the mandate of each member. It is equally important to gather data on cross-sectoral financing that goes to forests.

6.3.4 Advantages and Disadvantages of Establishing a Voluntary Global Forest Fund

27. The discussion on how to mobilize sufficient funding for sustainable forest management has been the subject of policy debate at the global level for about twenty years. Part of this discussion has been on the options that could help address this issue at the global level. There has been a long debate on the pros and cons of devoting a specific and targeted fund or mechanism to increasing financial resources for implementation of the forest instrument and the GOFs, with a view to achieving SFM, in a systematic and predictable manner. Arguments have also been put forward on the benefits of establishing a voluntary global forest fund to provide dedicated resources, over and above the existing sources, to ensure that sufficient resources are available to sustainable management of all types of forests.

28. In contrast, arguments have also been put forward on the need to use the existing forest related financing mechanisms and instruments, as they are capable of addressing the gaps in forest financing. These arguments were complemented by additional arguments that financing forests is a national responsibility of individual countries, external financing has limitations, and global institutions would never be able to provide the required amount of financing needed for

SFM. Moreover, the flow of unprecedented amounts of financing to the forest/climate change agenda has brought an historic opportunity for financing SFM. Therefore, countries should take advantage of these opportunities, as donors have limitations and cannot necessarily afford significant additional funding for forests.

29. Arguments that have been suggested *in favor* of a voluntary global forest fund include that it could help to compensate for insufficiencies in national resources for forests and address thematic and geographic financing gaps; provide a reliable and global resource mobilization framework specifically for SFM with a clear and simple set of procedures; and help developing countries with targeted incentives to achieve SFM and attract new, additional and predictable financial resources. Additional arguments in favour are that it could: leverage national public funding and other public and private financing; strengthen the NFPs and their financing strategies; improve focus on and transparency of SFM financing; contribute to bridging governance reforms and equity issues; and provide a bridge to long-term and more sustainable financing internalized at the local, national, regional and international levels.

30. Arguments that have been suggested *against* a voluntary global forest fund include that such a fund could aggravate problems of fragmentation and lack of coordination as well as identification of targeted areas for funding among related instruments; that launching the scheme will require a major political effort upfront by all participating countries; and that the modest support for the ITTO Bali Partnership Fund and Thematic Programmes, in their intense attempt to raise funds for SFM through these new Funds, has not so far resulted in significant new financing. Additional arguments against are that it does not have clear added value in relation to existing financing mechanisms; that few countries have the absorptive capacity for effective fund utilization; that it would mean carving out ODA from other donor priorities; and that new bureaucracy and high transaction costs would be created.

31. Whether or not to establish a voluntary global forest fund is a matter of a political decision by governments, and is not the subject of this chapter. However, it should be recognized that a single fund may or may not be the answer to the problem that countries are facing.

32. From a conceptual point of view, a global fund could focus on aspects of sustainable forest management that are not covered by other conventions and organizations. It would need to give priority to the thematic and geographical areas that have been identified as having major financing gaps. This fund would also need to meet important upfront financing requirements for creating an enabling environment for attracting funds from other sources.

33. In light of the above, a more detailed description of some basic criteria for such a fund would be needed to elaborate the proposal for further consideration. For example, it is important to know how this global fund would operate, where it would be located, what would be the modalities for accessing its resources, what would be the eligibility criteria, how the funds would be collected and ensured, how this global fund would work with existing multilateral forest financing mechanisms, and how to ensure complementarity among these institutional funds. A global fund should also identify a role for national funds that will complement the country-level resources to finance SFM, including national forest funds. Defining the links between such a fund and, for example, the NFP/NFFSs could also be useful.

34. Alternatively, a number of “targeted funds” could complement the existing forest related financing mechanisms to address the SFM gaps, needs and the areas that are not currently addressed by these mechanisms. While this would require some policy adjustments in the respective institutions and organizations to include SFM elements in their work, it could involve fewer complications and duplications.

Conclusions

35. Significant progress has been made at the national, regional and international levels in enhancing the contribution of forests to long-term sustainable development. There is better and wider understanding of sustainable forest management, and there is now agreement on the forest instrument as a comprehensive instrument on forests containing the four global forest objectives. In addition, forests have been integrated into the work of several multilateral environmental agreements.

36. The full range of forest goods and services needs to be better recognized, including through payments for ecosystem services, so that they may be internalized in GDP figures. This would strongly contribute to raising the visibility of forests and including them in the political agenda. Sustainable forest management outside protected areas also generates global public goods that need to be compensated.

37. To strengthen and mobilize resources for forests at the national level, actions have to be taken to improve policy, legislative and institutional frameworks. It is also necessary to engage various stakeholders, including the private sector.

38. National forest financing strategies should work in a holistic fashion and capitalize on the linkages with connected sectors and programme objectives. Development and incorporation of national forest funds into national forest programmes and forest policy and legislation is another effective option to address sector financing needs.

39. Regional organizations’ and processes’ roles have to be strengthened to help countries mobilize funds for forests and help them address sustainable forest management challenges in general, and financing of forests in particular.

40. Implementation of the forest instrument as the only globally agreed framework on promoting the sustainable management of all types of forests at all levels has to be strengthened at all levels including by setting up inter-ministerial coordination committees for implementation of the forest instrument. At the global level, implementation of this instrument should be mainstreamed in the programme of work of various forest-related financing mechanisms, organizations and initiatives – and necessary financing should be made available to strengthen its implementation and reporting.

41. There is a clear need to strengthen mechanisms and processes which collect national data on forest financing, including in the implementation of the forest instrument. This should be

done by strengthening existing mechanisms and networks, in particular within and among CPF member organizations.

42. There is no one single solution to address all of the needs in forest financing. The magnitude of the issue requires actions at local, national, regional and global levels and by all stakeholders. At the global level it is important to look for a mixture of measures at all levels and seek for a win-win solution by putting all the options as complementary. In this context, while the international community should strive to strengthen existing forest-related financing mechanisms, it can also consider devoting a fund or funds to address the SFM needs and gaps not yet addressed by the existing mechanisms. This solution can bring benefits for all countries and stakeholders.

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APPENDIX A: PRIMARY DESIGNATED FUNCTIONS OF FORESTS BY PERCENTAGE (2010)³⁰⁵

	Production	Soil and water protection	Biodiversity conservation	Social services	Multiple uses	Other	None or unknown
Eastern & Southern Africa	27	5	10	n.s.	27	0	31
Northern Africa	47	5	16	n.s.	5	0	27
Western & Central Africa	29	1	16	n.s.	13	n.s.	42
Africa	30%	3%	14%	n.s.	17%	n.s.	35%
East Asia	39	33	6	3	19	0	0
South & Southeast Asia	42	19	21	n.s.	12	0	6
Western & Central Asia	22	31	6	2	38	0	n.s.
Asia	39%	26%	13%	2%	17%	0%	3%
Europe	52%	9%	4%	2%	11%	21%	n.s.
Caribbean	28%	38%	19%	1%	4%	n.s.	10%
Central America	19	9	47	4	10	n.s.	11
North America	14	0	15	0	68	n.s.	3
North & Central America	14%	n.s.	16%	n.s.	66%	n.s.	4%
Oceania	6%	n.s.	16%	n.s.	32%	34%	11%
South America	14%	7%	13%	14%	11%	0%	41%
WORLD	30%	8%	12%	4%	24%	7%	16%

* n.s. = not significant, indicating a very small value

³⁰⁵ FAO, Forest Resources Assessment 2010 database, <http://www.fao.org/forestry/fra/fra2010/en/>

**APPENDIX B: EXTERNAL FINANCIAL FLOWS TO FORESTS – ODA
COMMITMENTS**

Bilateral and Multilateral Commitments to Forests, 2002-2010*								
Source	2002-2004		2005-2007		2008-2010		Net Change	Net Change
	3-year averages in USD millions at 2010 exchange rates						2002-2004 to 2008-2010	2005-2007 to 2008-2010
		Share %		Share %		Share %		
Bilateral								
Australia	5.77	1.32%	17.43	3.02%	31.38	4.55%	444.09%	79.99%
Austria	0.34	0.08%	0.37	0.06%	0.29	0.04%	-15.62%	-20.60%
Belgium	2.46	0.56%	3.19	0.55%	12.54	1.82%	410.85%	292.98%
Canada	6.71	1.54%	3.45	0.60%	9.66	1.40%	43.95%	180.43%
Denmark	5.53	1.27%	6.21	1.08%	1.21	0.18%	-78.12%	-80.49%
Finland	13.24	3.04%	22.59	3.92%	52.77	7.65%	298.50%	133.57%
France	5.53	1.27%	2.35	0.41%	20.16	2.92%	264.49%	756.84%
Germany	54.28	12.46%	41.93	7.27%	66.83	9.68%	23.12%	59.41%
Greece	0.03	0.01%	0.05	0.01%	0.00	0.00%	-100.00%	-100.00%
Ireland	0.10	0.02%	0.00	0.00%	0.00	0.00%	-100.00%	-100.00%
Italy	0.88	0.20%	0.51	0.09%	0.34	0.05%	-61.53%	-33.85%
Japan	240.27	55.16%	381.94	66.22%	163.54	23.69%	-31.94%	-57.18%
Korea	0.00	0.00%	3.43	0.59%	7.44	1.08%	...	117.27%
Luxembourg	4.04	0.93%	1.29	0.22%	1.31	0.19%	-67.51%	2.07%
Netherlands	32.48	7.46%	38.32	6.64%	20.12	2.92%	-38.05%	-47.48%
New Zealand	0.41	0.09%	1.23	0.21%	0.06	0.01%	-86.16%	-95.39%
Norway	8.09	1.86%	5.74	0.99%	229.87	33.30%	2739.77%	3906.38%
Portugal	0.16	0.04%	0.10	0.02%	0.06	0.01%	-63.71%	-41.62%
Spain	1.45	0.33%	1.56	0.27%	10.43	1.51%	617.45%	569.69%
Sweden	9.93	2.28%	10.39	1.80%	16.63	2.41%	67.53%	60.10%
Switzerland	12.31	2.83%	8.17	1.42%	12.89	1.87%	4.72%	57.81%
United Kingdom	22.81	5.24%	10.31	1.79%	29.42	4.26%	28.98%	185.23%
United States	8.77	2.01%	16.22	2.81%	3.27	0.47%	-62.68%	-79.83%
Subtotal	435.62		576.76		690.24		58.45%	19.68%
Multilateral								
AfDF	0.00	0.00%	19.68	6.98%	0.00	0.00%	...	-100.00%
ADB Special Funds	0.00	0.00%	17.03	6.04%	0.00	0.00%	...	-100.00%
EU Institutions	28.74	11.55%	23.29	8.26%	45.29	8.90%	57.60%	94.50%
GEF**	71.74	28.82%	113.26	40.17%	93.05	18.29%	29.70%	-17.84%
IFAD	4.20	1.69%	1.55	0.55%	5.06	1.00%	20.66%	226.64%
Isl.Dev Bank	0.00	0.00%	0.00	0.00%	0.09	0.02%	...	...
Nordic Dev.Fund	0.00	0.00%	0.00	0.00%	1.32	0.26%	...	...
UNDP	0.52	0.21%	0.58	0.21%	0.96	0.19%	84.17%	63.94%
UNECE	0.00	0.00%	0.00	0.00%	0.06	0.01%	...	...
World Bank***	143.71	57.74%	106.59	37.80%	363.01	71.34%	152.60%	240.57%
Subtotal	248.90		281.98		508.84		104.43%	80.45%
Total	684.52		858.74		1199.08		75.17%	39.63%

* Unless otherwise indicated source is OECD.Stat with data extracted on 09 May 2012 15:22 UTC (GMT).								
** Source: The GEF. GEF forest projects are defined by their inclusion of one of two elements: (1) the project's contribution to SFM (i.e. the project addresses one or more of the seven elements of SFM adopted under the UNFF forest instrument; and (2) the project acknowledges the significance of SFM (i.e. USD 1 million or more of funding is directed towards one or more of the seven elements of SFM).								
*** Source: World Bank Group. Figures include commitments from IBRD/IDA, Recipient Executed A and Special Finance. The Bank uses Sector coding to facilitate reporting of Bank activities. Sector codes indicate which part of the economy is supported by a Bank intervention. Up to five sector codes can be assigned to any Bank operation, with the proportion of the activities identified. If, for example, a project indicates 20% of a USD 50 million watershed rehabilitation project supporting the forest sector, then USD 10 million would be recorded in the total commitments to forests.								

**APPENDIX C: EXTERNAL FINANCIAL FLOWS TO FORESTS – ODA
DISBURSEMENTS**

Bilateral and Multilateral Disbursements to Forests, 2002-2010*								
Source	2002-2004		2005-2007		2008-2010		Net Change	Net Change
	3-year averages in USD millions at 2010 exchange rates						2002-2004 to 2008-2010	2005-2007 to 2008-2010
	Share %		Share %		Share %			
Bilateral								
Australia	9.90	3.05%	6.86	1.73%	33.16	4.70%	235.03%	383.22%
Austria	0.26	0.08%	0.31	0.08%	0.42	0.06%	63.34%	34.79%
Belgium	1.78	0.55%	2.73	0.69%	9.16	1.30%	413.54%	235.77%
Canada	12.52	3.86%	4.63	1.17%	6.84	0.97%	-45.38%	47.65%
Denmark	1.46	0.45%	3.43	0.86%	3.24	0.46%	121.55%	-5.57%
Finland	11.43	3.52%	6.95	1.75%	27.54	3.91%	140.84%	296.02%
France	4.38	1.35%	4.41	1.11%	5.00	0.71%	14.10%	13.41%
Germany	57.95	17.86%	51.24	12.91%	50.26	7.13%	-13.26%	-1.91%
Greece	0.03	0.01%	0.05	0.01%	0.00	0.00%	-100.00%	-100.00%
Ireland	0.10	0.03%	0.00	0.00%	0.00	0.00%	-100.00%	-100.00%
Italy	0.58	0.18%	0.57	0.14%	4.17	0.59%	615.58%	629.00%
Japan	109.70	33.82%	213.25	53.71%	279.16	39.61%	154.47%	30.91%
Korea	0.00	0.00%	0.88	0.22%	6.11	0.87%	...	595.84%
Luxembourg	1.30	0.40%	1.29	0.32%	1.31	0.19%	1.23%	2.07%
Netherlands	42.00	12.95%	25.14	6.33%	20.45	2.90%	-51.32%	-18.68%
New Zealand	0.40	0.12%	0.37	0.09%	0.50	0.07%	23.62%	33.44%
Norway	8.43	2.60%	6.26	1.58%	189.87	26.94%	2153.07%	2931.35%
Portugal	0.16	0.05%	0.10	0.03%	0.06	0.01%	-63.71%	-41.65%
Spain	1.45	0.45%	1.56	0.39%	11.43	1.62%	686.05%	633.73%
Sweden	6.36	1.96%	9.47	2.38%	12.79	1.81%	101.03%	35.10%
Switzerland	9.80	3.02%	9.75	2.46%	13.37	1.90%	36.44%	37.06%
United Kingdom	35.76	11.02%	23.70	5.97%	26.94	3.82%	-24.67%	13.68%
United States	8.63	2.66%	24.11	6.07%	3.04	0.43%	-64.75%	-87.38%
Subtotal	324.39		397.06		704.81		117.27%	77.50%
Multilateral								
AfDF	7.08	3.03%	13.79	4.09%	4.45	0.80%	-37.15%	-67.74%
ADB Special Funds	0.00	0.00%	0.00	0.00%	0.38	0.07%	...	...
EIB**	6.97	2.98%	69.57	20.64%	188.39	33.89%	2603.34%	170.77%
EU Institutions	7.25	3.10%	49.39	14.66%	52.72	9.48%	627.22%	6.75%
GEF***	73.52	31.43%	95.90	28.46%	97.40	17.52%	32.48%	1.56%
ITTO****	16.92	7.23%	14.53	4.31%	15.18	2.73%	-10.25%	4.52%
UNDP	0.52	0.22%	0.58	0.17%	0.96	0.17%	84.17%	64.36%
UNECE	0.00	0.00%	0.00	0.00%	0.06	0.01%	...	...
WFP	0.00	0.00%	0.00	0.00%	0.00	0.00%	...	...
World Bank*****	121.64	52.01%	93.25	27.67%	196.39	35.33%	61.45%	110.61%
Subtotal	233.89		337.01		555.92		137.69%	64.96%

Total	558.28	734.07	1260.73	125.82%	71.75%
* Unless otherwise indicated source is OECD.Stat with data extracted on 09 May 2012 15:22 UTC (GMT).					
** Source: European Investment Bank. Figures are loans.					
*** Source: The GEF. GEF forest projects are defined by their inclusion of one of two elements: (1) the project's contribution to SFM (i.e. the project addresses one or more of the seven elements of SFM adopted under the UNFF forest instrument; and (2) the project acknowledges the significance of SFM (i.e. USD 1 million or more of funding is directed towards one or more of the seven elements of SFM).					
**** Source: ITTO.					
***** Source: World Bank Group. Figures include commitments from IBRD/IDA, Recipient Executed A and Special Finance. The Bank uses Sector coding to facilitate reporting of Bank activities. Sector codes indicate which part of the economy is supported by a Bank intervention. Up to five sector codes can be assigned to any Bank operation, with the proportion of the activities identified. If, for example, a project indicates 20% of a USD 50 million watershed rehabilitation project supporting the forest sector, then USD 10 million would be recorded in the total commitments to forests.					

APPENDIX D: RECIPIENTS OF ODA

3-year average disbursements in 2010 USD		2002-2004	2005-2007	2008-2010	
Europe	Albania	0.69	1.02	3.08	
	Belarus	0.00	0.00	0.00	
	Bosnia-Herzegovina	1.08	1.25	1.01	
	Croatia	0.00	0.00	0.00	
	Cyprus	0.00	0.00	0.00	
	Gibraltar	0.00	0.00	0.00	
	Kosovo	0.00	0.00	1.36	
	Macedonia, FYR	0.03	0.16	0.02	
	Malta	0.00	0.00	0.00	
	Moldova	0.00	0.00	0.00	
	Montenegro	0.00	0.37	1.07	
	Serbia	2.09	2.09	1.01	
	Slovenia	0.00	0.00	0.00	
	States Ex-Yugoslavia	0.30	0.40	0.00	
	Turkey	0.67	0.34	0.35	
	Ukraine	0.00	1.39	0.89	
	Europe, regional	0.01	0.00	4.28	
	Europe, Total	4.86	7.02	13.08	
Africa	North of Sahara	Algeria	0.01	0.19	0.08
		Egypt	0.00	0.03	0.04
		Libya	0.00	0.00	0.00
		Morocco	0.38	1.82	0.76
		Tunisia	7.03	7.59	2.70
		North of Sahara, regional	0.06	0.00	0.37
		North of Sahara, Total	7.47	9.62	3.95
	South of Sahara	Angola	-0.01	0.04	0.76
		Benin	3.83	5.40	3.46
		Botswana	0.20	0.10	0.07
		Burkina Faso	2.64	3.55	3.17
		Burundi	0.03	0.51	0.01
		Cameroon	12.54	7.85	5.97
		Cape Verde	0.26	0.19	0.00
		Central African Rep.	1.85	17.44	3.69
		Chad	0.02	0.22	0.02
		Comoros	0.00	0.00	0.00
		Congo, Dem. Rep.	9.68	7.71	8.30
		Congo, Rep.	0.05	0.61	1.21
		Cote d'Ivoire	2.16	0.05	6.05
		Djibouti	0.02	0.03	0.11
		Equatorial Guinea	0.01	0.00	0.15
		Eritrea	0.08	0.17	0.63
		Ethiopia	5.00	3.50	11.40
		Gabon	0.96	1.67	2.87
		Gambia	1.47	0.59	0.02
		Ghana	10.09	8.93	17.60
Guinea	2.63	1.90	0.81		
Guinea-Bissau	0.00	0.00	0.04		
Kenya	1.59	1.86	9.99		
Lesotho	0.13	0.12	0.11		

	Liberia		0.17	0.72	0.84
	Madagascar		2.60	0.36	0.82
	Malawi		4.20	2.88	9.03
	Mali		1.16	0.99	1.96
	Mauritania		0.01	0.01	1.13
	Mauritius		0.00	0.00	0.00
	Mayotte		0.00	0.00	0.05
	Mozambique		3.75	0.88	5.11
	Namibia		2.08	1.55	1.11
	Niger		0.31	0.18	0.17
	Nigeria		0.05	0.02	0.17
	Rwanda		1.40	2.09	1.51
	Sao Tome & Principe		0.01	0.02	0.00
	Senegal		10.28	4.10	3.37
	Seychelles		0.00	0.00	0.00
	Sierra Leone		0.00	0.00	0.00
	Somalia		0.00	0.00	0.00
	South Africa		1.74	0.24	2.76
	St. Helena		0.00	0.00	0.00
	Sudan		0.00	0.40	2.24
	Swaziland		0.00	0.00	0.02
	Tanzania		3.28	5.64	6.73
	Togo		0.71	0.03	0.04
	Uganda		7.68	8.38	3.17
	Zambia		1.75	0.57	0.40
	Zimbabwe		0.12	0.06	0.01
	South of Sahara, regional		1.13	13.76	11.97
	South of Sahara, Total		97.67	105.33	129.02
	Africa, regional		1.71	2.97	25.81
	Africa, Total		106.85	117.92	158.77
America	<i>North & Central America</i>	Anguilla	0.00	0.00	0.00
		Antigua and Barbuda	0.00	0.00	0.00
		Aruba	0.00	0.00	0.00
		Bahamas	0.00	0.00	0.00
		Barbados	0.00	0.00	0.00
		Belize	0.00	0.00	0.00
		Bermuda	0.00	0.00	0.00
		Cayman Islands	0.00	0.00	0.00
		Costa Rica	2.41	1.52	0.97
		Cuba	0.56	0.30	0.98
		Dominica	0.00	0.00	0.00
		Dominican Republic	0.23	0.85	1.20
		El Salvador	0.03	0.34	0.08
		Grenada	0.40	0.05	0.00
		Guatemala	4.03	1.48	1.97
		Haiti	0.02	0.01	1.24
		Honduras	4.25	4.57	2.52
		Jamaica	1.11	0.24	0.18
		Mexico	0.62	0.50	0.35
		Montserrat	0.00	0.00	0.00
Netherlands Antilles	0.00	0.00	0.00		
Nicaragua	3.53	2.97	2.37		
Panama	0.94	0.91	1.09		
St. Kitts-Nevis	0.00	0.00	0.00		

		St. Lucia	0.00	0.00	0.00	
		St. Vincent & Grenadines	0.01	0.04	0.04	
		Trinidad and Tobago	0.00	0.00	0.00	
		Turks and Caicos Islands	0.00	0.00	0.00	
		Virgin Islands (UK)	0.00	0.00	0.00	
		West Indies, regional	0.52	0.00	0.27	
		North & Central America, regional	1.62	0.40	0.80	
		North & Central America, Total	20.28	14.18	14.08	
	South America	Argentina	0.25	2.02	1.03	
		Bolivia	9.88	4.13	10.97	
		Brazil	9.67	10.36	93.71	
		Chile	2.32	3.33	1.27	
		Colombia	5.16	4.44	4.21	
		Ecuador	2.62	1.51	1.39	
		Guyana	1.16	0.29	0.87	
		Paraguay	0.11	0.04	0.20	
		Peru	3.89	2.59	3.09	
		Suriname	0.84	0.07	0.19	
		Uruguay	0.29	0.11	0.07	
		Venezuela	0.03	0.02	0.05	
		South America, regional	1.05	1.81	7.84	
		South America, Total	37.27	30.73	124.88	
		America, regional	0.97	3.83	2.49	
		America, Total	58.52	48.74	141.45	
Asia	Far East Asia	Brunei	0.00	0.00	0.00	
		Cambodia	5.71	2.78	1.71	
		China	81.49	118.88	113.53	
		Chinese Taipei	0.00	0.00	0.00	
		Hong Kong, China	0.00	0.00	0.00	
		Indonesia	15.38	22.01	29.36	
		Korea	0.00	0.00	0.00	
		Korea, Dem. Rep.	0.00	0.00	0.01	
		Laos	3.26	6.73	8.43	
		Macao	0.00	0.00	0.00	
		Malaysia	1.80	1.09	1.08	
		Mongolia	0.13	0.69	4.77	
		Philippines	2.79	2.33	3.29	
		Singapore	0.00	0.00	0.00	
		Thailand	1.10	0.82	0.80	
		Timor-Leste	0.39	0.02	0.57	
		Vietnam	17.48	28.46	26.53	
			Far East Asia, regional	0.36	1.31	0.02
			Far East Asia, Total	129.89	185.12	190.10
		South & Central Asia	Afghanistan	0.26	0.53	0.71
			Armenia	0.42	1.20	1.27
			Azerbaijan	0.03	0.03	-0.02
			Bangladesh	1.41	0.57	0.69
			Bhutan	1.46	1.47	0.97
			Georgia	1.01	1.34	0.13
			India	39.36	96.94	115.80
			Kazakhstan	0.00	0.01	0.00
	Kyrgyz Republic		1.34	1.94	1.36	
	Maldives		0.01	0.00	0.00	

	Myanmar		3.06	3.33	2.09
	Nepal		7.66	4.83	9.88
	Pakistan		4.20	1.14	0.44
	Sri Lanka		1.35	2.39	0.80
	Tajikistan		0.00	0.10	0.04
	Turkmenistan		0.00	0.00	0.55
	Uzbekistan		0.00	0.00	0.00
	Central Asia, regional		0.00	1.10	0.45
	South Asia, regional		0.00	0.04	0.01
	South & Central Asia, regional		1.22	0.58	0.50
	South & Central Asia, Total		62.78	117.55	135.67
<i>Middle East</i>	Bahrain		0.00	0.00	0.00
	Iran		0.01	0.01	0.19
	Iraq		0.00	0.00	0.00
	Israel		0.00	0.00	0.00
	Jordan		0.03	0.05	0.09
	Kuwait		0.00	0.00	0.00
	Lebanon		0.01	0.05	0.94
	Oman		0.72	0.10	0.00
	Qatar		0.00	0.00	0.00
	Saudi Arabia		0.14	0.24	0.00
	Syria		0.02	0.00	0.03
	United Arab Emirates		0.00	0.00	0.00
	West Bank & Gaza Strip		0.05	0.01	0.09
	Yemen		0.00	0.00	0.00
	Middle East, regional		0.00	0.00	0.05
	Middle East		0.98	0.46	1.39
	Asia, regional		2.91	4.46	11.49
	Asia, Total		196.55	307.59	338.65
<i>Oceania</i>	Cook Islands		0.00	0.00	0.00
	Fiji		0.06	0.15	0.10
	French Polynesia		0.00	0.00	0.00
	Kiribati		0.00	0.00	0.00
	Marshall Islands		0.00	0.00	0.00
	Micronesia, Fed. States		0.02	0.00	0.02
	Nauru		0.00	0.00	0.00
	New Caledonia		0.00	0.00	0.00
	Niue		0.03	0.00	0.00
	Northern Marianas		0.00	0.00	0.00
	Palau		0.01	0.18	0.01
	Papua New Guinea		3.21	1.80	2.26
	Samoa		0.03	0.21	0.05
	Solomon Islands		1.77	0.32	0.52
	Tokelau		0.00	0.00	0.00
	Tonga		0.18	0.10	0.01
	Tuvalu		0.00	0.00	0.00
	Vanuatu		0.15	0.33	0.27
	Wallis & Futuna		0.00	0.00	0.34
Oceania, regional		0.09	0.33	0.27	
	Oceania, Total		5.55	3.43	3.84
	Unspecified Recipients		25.90	30.23	149.73
World Total					398.24

APPENDIX E: ANALYSIS OF PRSPs

Poverty Reduction Strategy Papers								Forestry Activities as Part of other Objectives							
Measures from 2006 WB Document															
Country	Economy	LDC	Year	<i>Description of the links between poverty and forests, and that between forests and growth</i>	<i>Description of forest sector problems, challenges and issues</i>	<i>Policy and programme responses to address the challenges identified in the sector</i>	<i>Coherent strategy to implement the policy reforms and programmes including financing options</i>	Water Quality	Energy (Fuel-wood)	Soil Quality	Employment/ Investment	Desertification	Erosion	Biodiversity Conservation	Climate Change
Afghanistan	LIC	y	2008	x	...	x	...	x	x	x	x	x	...	...	...
Albania	UMIC		2008	...	...	...	...	x	..	x	x	...	x	x	...
Armenia	LMIC		2008	...	...	...	...	...	..	...	x	...	...	x	...
Azerbaijan*	UMIC		2003	x	x	...	...	...	x	x	...	...	...	...	...
Bangladesh*	LIC	y	2005	x	x	x	x	...	x	...	x	...	...	x	...
Benin	LIC	y	2011	...	...	...	...	...	..	...	x	...	...	...	x
Bhutan*	LMIC	y	2004	...	...	...	...	...	..	...	...	...	...	...	...
Bolivia	LMIC		2001	...	...	...	...	...	..	...	x	x	...	x	...
Burkina Faso*	LIC	y	2005	x	...	...	...	...	..	x	x	x	...	x	...
Burundi	LIC	y	2007	x	...	...	...	x	x	...	...	...	...	...	...
Cambodia*	LIC	y	2006	x	x	x	x	...	x	...	x	...	...	...	...
Cameroon*	LMIC		2003	x	x	x	...	...	..	...	x	...	...	...	...
Cape Verde	LMIC		2005	...	...	...	...	...	..	...	x	...	...	...	...
Chad*	LIC	y	2003	x	x	x	...	...	x	...	x	x	...	...	...
Congo (DRC)	LIC	y	2007	x	x	x	x	...	..	...	...	...	...	x	x
Côte d'Ivoire	LMIC		2009	...	x	x	x	...	x	x	...	...	...	x	x
Djibouti	LMIC	y	2009	...	...	...	...	...	..	...	...	x	...	...	...
Dominica	UMIC		2006	...	...	...	...	x	...	...	x	...	...	x	x
Ethiopia	LIC	y	2011	...	...	...	...	...	..	...	...	...	...	...	...
Gambia, The	LIC	y	2007	x	...	...	...	...	x	x	x	...	...	...	...
Georgia*	LMIC		2003	x	...	...	...	...	..	...	...	...	...	...	...
Ghana*	LMIC		2006	x	x	x	...	...	..	...	x	...	...	...	...

Guinea	LIC	y	2008	x	x	x	...	...	x	x	...	...	...	x	...
Guinea-Bissau	LIC	y	2007	x	...	...	...	...	...	...	x	...	...	x	...
Guyana*	LMIC		2002	x	x	x	...	...	...	...	x	...	...	...	...
Haiti	LIC	y	2008	x	...	x	...	...	x	x	...	...	x	x	x
Honduras	LMIC		2001	x	x	x	x	...	x	x	x	...	x	x	...
Kenya	LIC		2005	...	...	...	...	...	x	...	x	...	...	...	...
Kyrgyz Republic*	LIC		2002	x	...	...	...	...	x	...	x	...	...	...	...
Lao PDR	LMIC	y	2008	x	...	x	...	...	...	...	x	...	...	...	...
Lesotho	LMIC	y	2006	...	...	...	...	...	x	...	x	...	...	...	...
Liberia	LIC	y	2008	...	x	x	...	...	...	...	x	...	...	...	...
Madagascar	LIC	y	2007	x	x	x	x	x	x	x	...	...	...	x	...
Malawi*	LIC	y	2002	...	...	...	...	...	x	...	...	...	...	...	...
Maldives	UMIC		2008	...	x	x	...	...	...	...	...	...	...	...	...
Mali	LIC	y	2008	...	...	...	...	...	x	...	x	...	...	...	...
Mauritania	LMIC	y	2011	...	...	...	...	...	x	...	...	...	...	x	x
Moldova*	LMIC		2004	...	x	x	...	x	x	x	x	...	x	x	...
Mongolia*	LMIC		2003	x	x	x	...	x	x	x	x	x	...	...	x
Mozambique	LIC	y	2011	...	...	x	...	...	...	...	x	...	x	...	x
Nepal*	LIC	y	2003	x	x	x	x	x	...	...	x	...	...	...	...
Nicaragua	LMIC		2010	x	x	x	x	...	...	...	...	...	...	...	x
Niger	LIC	y	2008	x	x	x	x	x	x	x	x	x	...	x	...
Nigeria*	LMIC		2005	x	x	x	...	...	...	...	x	x	x	x	...
Pakistan*	LMIC		2004	x	...	...	...	...	...	...	x	x	...	x	...
Rwanda	LIC	y	2008	x	x	x	x	...	x	x	x	...	x	x	...
São Tomé and Príncipe	LMIC	y	2005	x	x	x	x	...	...	...	x	...	...	x	...
Senegal	LMIC	y	2007	x	x	x	x	x	x	x	x	x	...	x	x
Serbia and Montenegro	UMIC		2004	x	x	x	x	x	...	...	x	...	...	x	...
Sierra Leone*	LIC	y	2005	...	...	...	...	...	...	...	...	...	...	x	...
Sri Lanka*	LMIC		2002	x	x	x	x	x	x	...	...	...	x	x	...
Tajikistan	LIC		2010	x	x	x	...	x	x	x	...	x	x	...	...
Tanzania	LIC	y	2011	x	...	x	...	...	...	...	x	...	...	...	...
Timor-Leste*	LMIC	y	2005	x	...	x	...	...	...	...	x	...	...	...	x
Togo	LIC	y	2010	x	...	x	...	...	...	...	x	...	x	...	...

Uganda	LIC	y	2010	...	x	x	x	...	x	x	x	...	...	x	...
Uzbekistan	LMIC		2008	...	...	...	...	...	...	...	...	x	x	...	...
Vietnam*	LMIC		2004	...	x	x	x	x	...	...	x	...	x	x	x
Yemen	LMIC	y	2003	...	...	...	...	x	...	...	...	x	...	...	...
Zambia	LMIC	y	2007	x	x	x	x	...	x	...	x	...	...	x	...

**APPENDIX F: CHARACTERISTICS OF LEADING RECIPIENTS OF FORESTRY
ODA BY REGION**

Top Recipients of ODA							
		Share of Commitments				Forest Cover	Income Classification
		2002-2004	2005-2007	2008-2010	Overall shares		
Europe	Serbia	73%	7%	4%	28%	medium	upper middle
	Regional Initiatives	0%	30%	18%	16%		
	Albania	0%	32%	14%	15%	medium	upper middle
North of Sahara	Tunisia	57%	6%	81%	48%	low	upper middle
	Morocco	28%	70%	3%	33%	medium	lower middle
	Regional Initiatives	13%	0%	16%	10%		
South of Sahara	Congo, DRC	11%	9%	13%	11%	high	low
	Kenya	5%	14%	6%	8%	low	low
	Benin	4%	19%	0%	8%	high	low
North and Central America	Honduras	72%	28%	38%	46%	high	lower middle
	Nicaragua	7%	27%	11%	15%	medium	lower middle
	Guatemala	6%	25%	0%	10%	medium	lower middle
South America	Brazil	19%	20%	68%	36%	high	upper middle
	Bolivia	27%	23%	15%	22%	high	lower middle
	Colombia	12%	39%	2%	18%	high	upper middle
Far East Asia	China	66%	65%	30%	53%	medium	upper middle
	Vietnam	20%	23%	14%	19%	high	lower middle
	Indonesia	7%	6%	33%	15%	high	lower middle
South and Central Asia	India	81%	95%	76%	84%	medium	lower middle

	Nepal	5%	0%	12%	6%		medium	low
	Georgia	4%	0%	0%	1%		medium	lower middle
Middle East	Oman	75%	21%	0%	32%		n/a	high
	Saudi Arabia	16%	53%	0%	23%		n/a	high
	Lebanon	1%	11%	54%	22%		medium	upper middle
Oceania	Papua New Guinea	58%	20%	28%	35%		high	lower middle
	Solomon Islands	22%	59%	8%	30%		high	lower middle
	Regional Initiatives	4%	0%	49%	18%			

* ODA commitments from OECD.Stat.

** Forest cover data from FRA.

*** Income data from World Bank.

ANNEX I:

Examples of Private Sector Financing Initiatives:

Timberland Funds' Investments in Latin America and the Caribbean

Among the largest private investors in forestry in LAC are the timberland funds. In the USA, for example, timberlands funds own over 200 million hectares of forests. Investors in timberland are generally pension funds.

The main pension funds are found in the United States. Many of them started investing in timberland after the enactment of the Employee Retirement Income Security Act (ERISA), in 1974. To comply with ERISA's new fiduciary requirements to maximize portfolio returns, pension fund managers diversified by investing in equities, commercial real estate, oil and gas and timberland. They identified timberland as a steady, relatively safe long-term investment, delivering equity-like returns with bond-like risk.

The California Public Employees' Retirement System is the United States' largest public pension fund with over USD 245 billion in assets. It recently invested in a USD 40 million timberland holding in Brazil, through the TIMO called GFP.

The Harvard Endowment Fund, a USD 35 billion fund, holds a substantial allocation of its assets in timberlands. In 2007, the Harvard Endowment Fund, through its company Los Boldos Harvard, acquired 38,000 hectares of pine and eucalyptus timberland in Argentina, purchased at a cost of USD 107 million.

The Ontario Teachers' Pension Plan is Canada's largest pension fund manager, investing USD 79 billion in assets and administering the pensions of Ontario's 250,000 active and retired teachers. The Plan has global infrastructure and timberland assets worth USD 2.3 billion. This is another fund looking for forest investment opportunities in Brazil.

In LAC, timberland funds invested altogether an average of USD 323 million per year during the period 2006-2011, or 12% of the total private investments in forestry. Out of this total about 68% has been invested in Brazil, through funds such as Brookfield, Cambium, Claritas, Florestal Brazil Investment, FC, Galtere, Global Forest Partners, GTF, Hancock Timber Resource Group, Phaunus, Quadris, Resources Management Services, Timber Value, the Timber Group and Terra Capital. Uruguay received 14% through Aurora Forestal, GMO Renewable Resources, PraderaRoja and RMK Timberland Group, while Argentina received 12% via GEF, GFP and Los Boldos Harvard, and Chile received 6% through GMO, Lignum Fund and Orion Capital.³⁰⁶

Green Resources Plantation Development in Africa

Green Resources AS is a plantation, carbon offset, forest products and renewable energy company that has invested about USD 55 million in Africa, mainly Mozambique, Sudan, Tanzania and Uganda. The company now has 14,000 hectares of plantation and has a planting

³⁰⁶ DANA (2009).

target of more than 200,000 hectares. In 2009 the company signed a framework agreement with the Mozambique government to establish 125,000 hectares of energy/pulp plantation and received title for 179,000 hectares of land in southern Sudan. In Uganda, the company has established a pole treatment plant to supply transmission poles to the Lake Victoria region. Green Resources has integrated carbon sequestration into some of its plantation and natural forests management programmes. The company has carbon offset projects in Mozambique, Tanzania, Sudan and Uganda. The projects have potential to generate 20 million tonnes of carbon offsets by the year 2020. Green Resources' Mapanda/Uchindile forest project was certified under the Voluntary Carbon Standard in July 2009. The company received the first payment of USD 0.8 million in 2010. Some 10% of this was passed on to communities for community development activities.³⁰⁷

Real Estate Investment Trust (REIT)

Another factor that contributed to the development of new private forest-related investments in the United States is the Real Estate Investment Trust (REIT). The REIT is a security that sells like a stock on the major exchanges and invests in real estate directly, either through properties or mortgages. REITs receive special tax considerations and typically offer investors high yields, as well as a highly liquid method of investing in real estate.

Individuals can invest in REITs either by purchasing their shares directly on an open exchange or by investing in a mutual fund that specializes in public real estate. An additional benefit to investing in REITs is that many are accompanied by dividend reinvestment plans (DRIPs). Among other things, REITs invest in shopping malls, office buildings, apartments, warehouses and hotels. Timberlands are considered a real estate investment, and therefore receive the same special tax consideration, making the forest-related investment more attractive.

Bradesco Bank

Bradesco, the second largest private Brazilian bank, is one of the co-founders and main supporters of the Sustainable Amazon Foundation (*Fundação Amazonas Sustentável*-FAS). In 2008, Bradesco donated USD 11.4 million for the creation of the FAS in collaboration with the government of the state of Amazonas in Brazil.

The resources were set up in a permanent fund, where only the profits are invested every year, exclusively in the payment of the beneficiaries of the "Programa Bolsa Floresta," a scheme of payment for ES supplied by natural forests in the state of Amazonas. This arrangement permits the FAS programmes to be financially sustainable in the long-term.

Bradesco also supplies a minimum annual contribution of USD 5.7 million to the FAS, through the sale of credit cards from the FAS and from the capitalization fund called the "PéQuente." These resources are applied towards the establishment of three components of the *Programa Bolsa Floresta* (Income, Social and Association), its programmes and support projects, and for

³⁰⁷ Green Resources (2010).

the payment of the FAS operational expenses.³⁰⁸ Information on other identified financial sources for forestry in LAC-based private financial investments is summarized in Table A1.4.

Table A1.4 Bradesco Bank Forestry-Related Projects (2008-2012)³⁰⁹

Project Title	PERIOD		VALUE (USD MILLION)		SHARE
	FROM	TO	TOTAL	ANNUAL	
Initial Investment in the BolsaFloresta	2008	2008	11.4	11.4	66.7%
Annual Contribution to the BolsaFloresta	2008	2012	28.6	5.7	33.3%
Total			40.0	17.1	100.0%

São Paulo Stock Exchange (BOVESPA)

The BOVESPA launched the Environmental and Social Stock Exchange (BVS&A) in 2003, which is a sort of stock exchange focusing on matters related to the environment, health, education and training. It is an initiative that uses the same model as a stock exchange to bring together non-profit organizations that require funds and social investors willing to support their programmes and projects.

Table A1.5 BOVESPA Forestry-Related Projects (2005-2012)³¹⁰

Project Title	Period		Investment (USD Million)		Share
	From	To	Total	Year	
What is Green Gives Life	2011	2012	0.06	0.03	21%
Schools in Action	2011	2012	0.06	0.03	21%
Biodiversity Condominium - Conservation Support Program	2011	2012	0.06	0.03	21%
Green Caatinga Project	2011	2012	0.06	0.03	20%
Giant Guarani: Social inclusion, springhead recovery and agroecological management	2005	2007	0.05	0.02	18%
Total			0.28	0.13	100%

³⁰⁸ FAS (2009).

³⁰⁹ FAS (2009), adapted by Ivan Tomaselli.

³¹⁰ BM&F Bovespa (2011), adapted by Ivan Tomaselli.

There were over 60 projects with financing needs varying from USD 17,143 to USD 85,715, all of which have been fully funded up to 2007.³¹¹ As of February 2012, USD 6.9 million was raised, with 109 projects listed since 2003. Some 103 projects have received full resources.³¹² Of this total, USD 280,000 was for forestry-related projects.

Examples of NGOs and Philanthropic Financing Initiatives

Conservation International (CI)

CI is committed to maintaining the highest standards of stewardship over the funds entrusted to it. In 2010 around 82% of every dollar it spent supported CI's programmes directly. Management and operations accounted for 11% of total spending, and development accounted for 7%.

In 2010, CI invested almost USD 139 million in conservation programmes all over the world. It invested nearly 70% of its resources in its people and in its partners. Thirty-eight per cent of its budget supports its staff—recognized experts in their respective fields and countries. Grant making, which comprised 31% of its expenditures in 2010, is a cornerstone of CI's programmatic delivery.

The Ecosystem Finance Division awarded more than USD 19.8 million in grants to non-governmental and private-sector partner organizations globally to stem the tide of biodiversity loss, ensure healthy communities and protect the ecosystem services upon which they depend.

CI stands upon a strong financial footing, having closed 2010 with net assets of USD 230 million. In 2010, it secured a USD 7 million commitment from the Walt Disney Company to develop large-scale REDD+ implementation programmes in Peru (50%) and the Democratic Republic of the Congo (50%)—the single largest corporate commitment to REDD+ to date.³¹³

EcoFund Ecuador

The EcoFund Ecuador is a private environmental trust fund established in 2005 with capital of USD 16.9 million. It co-finances conservation and sustainable development projects, mainly in the region directly affected by the crude oil pipeline.

The EcoFund is the outcome of a consensual process involving the two enterprises, Crude Oil Pipeline OCP Ecuador S.A. and the EnCana Corporation, and a group of social and environmental NGOs. Together with the Ecuador EcoFund Foundation and the Ecuador EcoFund Commercial Trust Fund, the National Environmental Fund (FAN) participates in the management and operation of the EcoFund.

³¹¹ FAO (2007a).

³¹² BM&F Bovespa (2011).

³¹³ Conservation International (2011).

The FAN is responsible for technical, administrative and financial management and for the design of methodologies, instruments and strategies for the cycle of projects to be approved by the EcoFund.

The EcoFund has varying duration, e.g. the EnCanafunds invested up to 2009 and OCP funds will be invested up to 2022. Sixty percent of its resources will be invested in areas along the route of the pipeline, 30% in parks and protected areas located in oil production areas, and 10% in fragile areas of strategic importance. Sixty percent of the resources of each project will be allocated to conservation, 35% to training, and 25% to 15% to research.³¹⁴

FUNDESNA

The Foundation for the Development of the National System of Protected Areas (FUNDESNA) has contributed to strengthening protected areas at national, departmental and municipal levels in Bolivia since 2000. The mission is to contribute to the development and sustainability of the national system of protected areas by raising, channeling and managing financial and non-financial resources for the implementation of programmes, projects and activities integrating the different sectors of Bolivian society.

FUNDESNA develops activities inside and outside protected areas, such as ecological systems, biological corridors, buffer zones, community lands and trans-boundary protected areas, among others.³¹⁵ To manage programme and project funds, FUNDESNA has staff capable of working with public and private entities, including social organizations, indigenous counterparts and community producers at a local, regional national and international level.³¹⁶ FUNDESNA is formed by several organizations, which together invest an average of USD 1.9 million per annum.

Helvetas Swiss Intercooperation

The Helvetas Swiss Intercooperation is one of the most experienced and largest development organizations in Switzerland, established in 2011 through the merger of the organizations Helvetas (founded 1955) and Intercooperation (founded 1982). As a politically neutral association, the Helvetas Swiss Intercooperation receives support from over 100,000 members and sponsors as well as 12 regional groups of volunteers.

It engages over 1,200 local and 60 international employees in 30 partner countries in Africa, Asia, Latin America and Eastern Europe. A total of 130 people work at the Bern and Zurich offices as well as at the branches in Lausanne and Balerna. They coordinate development projects, offer advisory services to governmental and non-governmental organizations and raise awareness concerning the problems faced by people in developing countries.

³¹⁴ FAO (2009c).

³¹⁵ FUNDESNA (2011a).

³¹⁶ FUNDESNA (2011b).

In 2009, it started developing the project called the Climate Change Adjustment Program (*Programa de Adaptación al Cambio Climático - PACCC*), in Peru, with a total budget of USD 10 million.³¹⁷

Moore Foundation

The Moore Foundation is the largest private donor to the Amazon Foundation conservation and research programme, with more than USD 200 million allocated to projects in the region since 2001. The goal of the foundation's Andes Amazon Initiative is to conserve the Amazonian forests, which provide habitat for biodiversity and regulate the regional climate cycle. Much of the research in the Amazon in recent years has been funded to some degree by the Moore Foundation.

Organizations such as Conservation International, World Wildlife Fund, Field Museum, Wildlife Conservation Society, Amazon Conservation Association, Woods Hole Research Center, *Instituto Internacional de Educação do Brasil*, *Instituto Socioambiental* and Amazon Conservation Team have received grants from the Moore foundation since 2001.³¹⁸

The Nature Conservancy (TNC)

TNC is the leading conservation organization working to preserve the plants, animals and natural resources. TNC works in the United States and in more than 30 other countries.

Water funds are a unique financial tool in which urban water users subsidize conservation in upstream watersheds as a cost-effective way to ensure sustainable freshwater supplies. The Latin American Water Funds Partnership, launched in 2011 by TNC, the FEMSA Foundation, the Inter-American Development Bank and the Global Environment Facility, seeks to preserve and restore watersheds and protect important water supplies in the region.³¹⁹

The Nature Conservancy and Conservation International brokered the largest-ever debt-for-nature swap under the Tropical Forest Conservation Act. Under the deal, the United States will forgive USD 26 million in debt owed to it by Costa Rica. In turn, Costa Rica will spend USD 26 million to conserve tropical forests in six areas—sites chosen from a blueprint of conservation gaps that the TNC helped create for Costa Rica.³²⁰

³¹⁷ HELVETAS (2012).

³¹⁸ USAID (2008).

³¹⁹ TNC (2011).

³²⁰ TNC (2007).

ANNEX II. CASE STUDIES

I. Sahel Region in Africa: Great Green Wall to Stop Desertification

The Great Green Wall (GGW), a living green wall of trees and bushes, envisioned by 11 African countries on the southern border of the Sahara and their international partners, is aimed at limiting the desertification of the Sahel region in Africa.³²¹ Sahelian lands are considered among the most vulnerable in the world to the process of desertification, which has further hastened as a result of climate change as well as the increased population pressure on these lands for livelihoods and survival. If left unaddressed, it is feared that this problem will imperil the lives of millions of people by exposing them to famines and food insecurity. This green barrier is expected to help safeguard Sahel countries against the southward expansion of the Sahara and increase the productivity of land in its zone of influence.

The GGW – 15 km wide and extending up to 8,000 km long – from Djibouti in the Horn of Africa in the east all the way across the continent to Dakar, Senegal, in the west, when completed will undoubtedly be the most significant ecological infrastructure of its kind in the world undertaken through international cooperation. Since 2007, for example, the FAO has supported the African Union and some of its member countries in strategic formulation of the activities that will enable the effective implementation of the GGW through two complementary projects. The first project, launched in 2010, involved Chad, Djibouti, Ethiopia, Mali and Niger while the second project, funded by the European Commission and commenced in 2011, involved Algeria, Burkina Faso, Egypt, Mauritania, Nigeria, the Gambia, Senegal and Sudan. Other collaborating partners include: the CEN-SAD Secretariat, the Pan African Agency for the Great Green Wall, the EU, the regional economic community partners (ECOWAS, IGAD and UMA), CILSS, OSS, the Global Mechanism of the UNCCD, ICRAF, WOCAT and AFF.³²²

The GCW initiative particularly focuses on supporting the efforts of local communities in the sustainable management and use of forests, rangelands and other natural resources. Its activities are also designed to contribute to climate change mitigation and adaptation and poverty alleviation in the region. They include establishing appropriate institutional platforms for knowledge sharing and resource mobilization, developing the needed capacities of local, regional and national stakeholders for effective technology transfer, and helping the communities implement identified farming and conservation practices.

By bringing together a portfolio of projects, the GGW is a catalyst for operationalizing a variety of international programmes for economic development and environmental protection in the region. The key stakeholders emphasize using the GGW concept as an opportunity for reinforcing and up-scaling successful sustainable land management practices and interventions at a landscape scale. Besides GEF, several international development institutions have made significant investment pledges to support the Wall.

³²¹ <http://www.guardian.co.uk/global-development/2011/feb/25/great-green-wall-sahel-desertification>

³²² <http://www.fao.org/forestry/aridzone/63000/en/>

II. China: Public Sector Support of Immense Magnitude to Forestry

Currently China leads the world in planting forests and promoting agroforestry. According to FAO,³²³ the area under planted forests has increased by 42% in the last ten years, accounting for 37% of the total forest area or 77 million hectares. Plantation forests are also a major source of timber supply, although China largely relies on imports to meet its demand for wood products. It is the world's largest importer of logs, waste paper and wood pulp.

Over the last 20 years, China has become the world's leader in NWFP production and processing technology. China is also the world's largest producer and exporter of processed NWFP commodities like honey, bamboo, rattan and mushroom products. One of the factors attributed to the success of the Chinese NWFP sector is its efficiency of adding value to NWFP and commercial interaction along the market chain, from small-scale producers all the way up to large-scale industrial processors and exporters. Forest tenure reform is a top priority for the Chinese government, and the Central Committee of the Chinese Communist Party and the State Council place importance on the development of forestry.³²⁴

The Chinese government has also initiated some of the largest eco-restoration and land rehabilitation programmes in the world. Many of these were developed to combat desertification, soil erosion, river sedimentation and flooding. Particularly in the last two decades, novel approaches to addressing the challenges of environmental degradation hinged on public payment schemes and market-based programmes.³²⁵ The two key aspects of these compensation programmes have been the mobilization of billions of Yuan entirely through domestic public sources and the strong involvement of all levels of government in their design and implementation.

The Sloping Land Conversion Programme or the "Grain for Green" initiative, for example, is one of the largest programmes, operating across 25 provinces and with an enrolment of around 23 million hectares of land for afforestation. Deforestation has been recognized as a major cause of soil erosion, increased frequency and intensity of dust storms, and diminishing water quality and human wellbeing. About 15 million participating farmers received compensation either in the form of cash, seedlings, or grain for setting aside their land. Besides promoting a transition to sustainable systems of production, direct payments to rural landowners to plant trees and grasses on farmland located in sloping and marginal areas also contributed to poverty reduction in rural areas. There is also evidence to suggest that the programme resulted in positive environmental outcomes such as reduced surface runoff and soil erosion and increased vegetation cover.³²⁶

Despite food security being an enormous challenge in China, by developing government incentives at scale for afforestation, ecological rehabilitation and the promotion of rural

³²³ FRA, Global forest resources assessment (2010).

³²⁴ FAO, FAO country brief on forestry (2012).

³²⁵ Pauli et al., Natural capital: The new political imperative (2010).

³²⁶ M.T. Bennet and J. Xu, China's Sloping Land Conversion Program: Institutional Innovation or Business as Usual? (2005).

livelihoods China has proved to the world how forestry can strike a balance between conservation and economic development. Its land conversion and public payment schemes, which focus on preventing ecological disasters, are considered worth emulation by developing countries facing similar situations.

III. Indonesia: Reducing Carbon Emissions through Global Partnerships

With about 94 million hectares of forests covering more than 50% of its land area, Indonesia has the world's third largest area of tropical forest and globally significant biodiversity. Besides being a national asset and a global public good, these forests are also vital to the livelihoods of 36 million Indonesians. In order to promote contributions of forests and forestry to socio-economic development and environmental sustainability, Indonesia's forest sector has been undergoing major reforms. These reform processes, at their core, endeavor to promote good governance and focus on issues such as decentralization, democratic decision-making, preventing illegal logging and reducing rural poverty. Particular attention is being paid to deforestation and degradation of forests for conversion to alternative land uses including biofuel production.³²⁷

Having recognized the seriousness of this issue, the Indonesian government has taken important steps not only to arrest conversion of vital forest ecosystems but to restore and rehabilitate them. Since 2007, the Indonesian government has engaged in several bilateral and multilateral partnerships and consortia on reducing emissions from deforestation and degradation (REDD+). Besides the government of Norway, which has committed USD 1 billion, many organizations support this process. Indonesia is also involved in the Forest Law Enforcement Governance and Trade (FLEGT) process and is moving toward implementing a Voluntary Partnership Agreement with the European Union. The Government has also strengthened control capacity and established a Special Forest Ranger Quick Response Unit. Harmonized legality standards to differentiate legal and illegal timber are also being developed. An Integrated Forest Fires Protection System has been designed in collaboration with the European Commission.³²⁸ In May 2010, Indonesia announced a two-year moratorium on issuing new permits to convert natural forests or peat lands to other land uses.

The goal of these partnerships, which include the President's REDD+ Task Force, is to support REDD+ actions and finance and to improve their effectiveness, efficiency, transparency and coordination. The partnerships' activities include undertaking carbon stock assessments, developing methodologies for restoration and improving forest governance and monitoring. The Kalimantan Forests and Climate Partnership, for example, endeavors to preserve 70,000 hectares of peat swamp forests and restore 200,000 hectares of degraded peat lands through re-flooding and reforestation.³²⁹ Under the national REDD+ strategy, there are incentive-based REDD+

³²⁷ The Mega Rice project, for example, involved draining around 1.4 million hectares of peat lands. Carbon emissions from peat lands are estimated to contribute up to half of all of Indonesia's greenhouse gas emissions (Pauli *et al.*, 2010).

³²⁸ FAO, FAO country brief on forestry (2012).

³²⁹ <http://www.climatechange.gov.au/government/initiatives/international-forest-carbon-initiative/action.aspx>

activities and opportunities for forest dependent communities to receive payments for maintaining forest cover intact.

The Indonesian forests and climate partnerships initiative is undoubtedly one of the first large-scale national REDD+ demonstration pilots in the world, and some of the activities undertaken through these partnerships are expected to provide valuable lessons for a future regime of international trading in forest carbon offsets.

IV. India: Guaranteeing Rural Jobs to Build Green Infrastructure

Forestry is the second largest land use after agriculture in India, and a fourth of its population, or roughly 250 million people, depend on forests either wholly or partially for their livelihoods.³³⁰ Of these, residents of the forest fringes, which make up the majority, are among the poorest and most vulnerable groups. Forestry is also the largest employer in the Indian energy sector, with about 11 million people engaged in fuel wood trade (both formally and informally) worth over USD 17 billion.³³¹ A major consequence of this intensive pressure on forests is their degradation, with significant socio-economic consequences including aggravated soil erosion, reduced soil fertility and diminished water catchment function.

Since the enunciation of the 1988 forest policy, which emphasized increasing the country's forest/tree cover to one third of its land area, major afforestation and reforestation efforts are ongoing in India.³³² They include, for example, the creation of the National Afforestation and Eco-development Board in 1992, whose main purpose is facilitating the promotion of forest plantations and forest rehabilitation programmes. With the demand for forest raw materials and products expanding rapidly, programmes such as the Grants-in-Aid for Greening India and the Gram Van Yojana were initiated to support tree planting on private and community lands. Recently, the Prime Minister's Council on Climate Change has also approved a ten-year Green India Mission, whose goal is to increase forest area by 5 million hectares by 2020 at an investment of USD 10.1 billion.³³³

One of the initiatives that has come from a non-forest sector and that showed significant potential to augmenting forest resources in the country is the National Rural Employment Guarantee Act.³³⁴ Often hailed as one of the largest initiatives of its kind in the world,³³⁵ the Act is an employment programme, mandated by legislation in 2005, that guarantees one hundred days of employment in every financial year to adult members of any rural household willing to do public work at the statutory minimum wage. The main objectives of the Act were to increase the purchasing power of rural poor, reduce distress migration to cities, and create durable assets in rural areas. Around one-third of the stipulated work force is women. The funding for the

³³⁰ J.R. Matta, *Rebuilding rural India: potential for further investments in forestry and green jobs* (2009).

³³¹ National Forest Commission, *Report of the National Forest Commission* (2006).

³³² FAO, *FAO country brief on forestry* (2012).

³³³ <http://www.hindustantimes.com/tabloid-news/newdelhi/PM-approves-Rs-46-000-crore-Green-India-Mission/Article1-665936.aspx>

³³⁴ Rechristened as Mahatma Gandhi National Rural Employment Guarantee Act in 2009.

³³⁵ Centre for Science and Environment, *The National Rural Employment Guarantee Act (NREGA): opportunities and challenges* (2008).

programme has increased considerably starting with an initial outlay of USD 2.5 billion in 2006–07 to about USD 8.91 billion in 2010-11.³³⁶

An important feature of the Act is the recognition of the importance of afforestation as a major component of its activities.³³⁷ With the prime focus being watershed management in rain-fed areas, which sustain 40% of India's population, its activities are geared toward augmenting water resources. In particular, water conservation and drought proofing with complementary forestry activities for water harvesting such as construction of small check dams and percolation ponds, and vegetation development are given importance. Further convergence of the Act's activities and forestry programmes would achieve lasting impacts.³³⁸

V. Burkina Faso: Empowering Women for Better Trade in Shea

Shea is one of the main forest products in the Sahel zone of the West Africa and Shea nuts and butter provide a significant source of income for rural communities in Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Nigeria, Senegal and Togo. The trees grow naturally throughout the semi-arid region of West Africa, but their largest concentration is in Burkina Faso where exports of Shea products accounted for the country's third most important export in 2000. The Shea butter, often called “women's gold” by the villagers in Burkina Faso, is extracted from the kernel through arduous processing, and is the exclusive prerogative of rural women. They are also totally involved in the collection of Shea nuts.³³⁹

With communally owned wooded savannahs comprising approximately half of the landscape, Shea has emerged as a vibrant sector for local economic development and sustainable forest management in Burkina Faso.³⁴⁰ Increasing demand for cooking and cosmetics uses, both for domestic consumption and export, has further fostered this strong growth in recent years. The improved economic condition of the Shea trade however has not equitably benefited the women who toiled the most. While their participation has remained restricted to local markets, men continue to dominate the lucrative export markets resulting in an unfair situation for women. Low literacy levels, lack of technical skills, and poor access to market information and formal credit further aggravate their plight.

In response to these changes, particularly after structural adjustment had negatively impacted the livelihoods of numerous poor families, the Burkina government and other national and international organizations took several initiatives. The key focus of these measures has been the development of the Shea sector through the empowerment of women engaged in this enterprise. Some of these initiatives include launching the Projet National Karité (PNK, National Shea Project) with financial and technical assistance from the Centre Canadien d'étude et de Coopération Internationale (CECI), mobilization of funding support from Taiwan, monitoring of

³³⁶ <http://www.nrega.nic.in/netnrega/home.aspx>

³³⁷ <http://knowledge.nrega.net/756/>

³³⁸ J.R. Matta, *Rebuilding rural India: potential for further investments in forestry and green jobs* (2009).

³³⁹ http://en.wikipedia.org/wiki/Shea_nut_and_butter_production_in_Burkina_Faso#cite_note-CW-0

³⁴⁰ B. Singer, *Mission Report: The Forests Dialogue Seventh Dialogue on Investing in Locally Controlled Forestry* UNFF unpublished report (Ouagadougou, Burkina Faso: 12-15 September 2011), p. 2.

exports by UNIFEM,³⁴¹ and the establishment of a coordinating committee by the government to ensure synergy among various donor institutions. The support of UNIFEM ensured direct purchases through a network of more than 100 Shea groups and steered a greater share of benefits to local women. The women were also trained to produce a higher quality product.³⁴²

The empowerment of women through the organization of local Shea cooperatives, besides creating better economic opportunities for women producers, helped them earn the respect of their families and provided new opportunities for their involvement in community development.³⁴³

VI. Zambia: Community Markets for Conservation

Community Markets for Conservation (COMACO) is a novel community based enterprise that aims at reducing poverty and hunger among thousands of poor farmers while saving wildlife and forest habitat in the Luangwa Valley in Zambia.³⁴⁴ The programme targets poor and food insecure farmers and organizes them into producer groups. Besides imparting training in diverse income-generation skills focused on sustainable agriculture, it creates local depots to provide better market access for selling surplus grains. Some of the skills imparted also include making organic fertilizer and establishing seed banks. COMACO purchases surplus produce from the producer groups at fair market prices and then resells it through its regional Conservation Trading Centres as processed, value-added, organic products under its special brand IT'S WILD!. A formal agreement with producer groups to adhere to sustainable land use practices qualifies them for ensuing conservation dividends. The main assumption is that, in the absence of COMOCO's support, poor and disenfranchised farmers in the area would indulge in poaching wildlife or burning forests for charcoal as a basic survival strategy.³⁴⁵

The most impressive aspect of the programme is the scale at which it operates. Over 30,000 farming families bring their surplus agricultural produce such as maize, beans, soybeans, rice, groundnuts and honey to about 75 rural trading depots and receive direct cash payments. COMACO's six regional trading centers carry tons of these materials from village-level storage facilities and convert them into finished products for their ultimate distribution and marketing across Zambia and to regional export markets. The value added across the entire market chain helps the programme to generate needed capital to run it on a self-sustaining basis. Farmers fully compliant with the conservation guidelines also receive an end-of-the-year "conservation dividend" to ensure their continuing participation. The conservation guidelines include a strong pledge not to poach or make illegal charcoal while associating with COMACO. The total package — from providing training on new farming methods to paying conservation dividends every year — has worked as a strong incentive against poaching or charcoal making, and is evidenced through the surrender of a large number of firearms and snares once used to kill wild animals.

³⁴¹ United Nations Development Fund for Women.

³⁴² http://www.thecommonwealth.org/gtinformation/164419/164962/168885/shea_butter/

³⁴³ <http://www.alaffia.com/empowerment.asp>

³⁴⁴ <http://www.itswild.org/about-comaco>

³⁴⁵ As explained in the National Geographic video. <http://www.itswild.org/national-geographic-video-about-comaco>

The success of the COMACO business model is attributed to good management, provision of immediate and tangible benefits to local communities, and hard work and dedication of COMACO's staff. Besides successfully managing the programme across a landscape of over 25,000 square miles, COMCAO is expanding to include community-based ecotourism to further the transformational changes that result in economic spin-offs for poverty reduction, food security and biodiversity conservation.³⁴⁶

VII. Brazil: Re-distributing Tax Revenues to Reward Environmental Conservation

Brazil has one of the largest protected area systems in the world. The country has also expanded conservation areas in recent years.³⁴⁷ These protected areas deliver several economic, social and environmental benefits at local, regional and global levels. However, they also carry some opportunity costs, particularly to local governments and communities, for not using the area for alternative purposes such as agricultural development. To compensate for such costs, since 1992 a number of Brazilian states have distributed a part of their value added tax (known as the ICMS or Imposto sobre Circulação de Mercadorias e Serviços) revenue to municipalities based on certain environmental criteria.

Under the Brazilian law, 75% of ICMS receipts are allocated to state governments and 25% to municipalities. Of the latter 25%, 75% must be distributed in proportion to the economic value-added recorded in each municipality. States with 'ecological ICMS' (or ICMS-E) redistribute the remaining ICMS revenue according to environmental indicators. While each state decides on the ecological indicators to be used, as well as the overall proportion that should be distributed, there are no pre-conditions placed on how municipalities use the ICMS-E. Since the ICMS tax constitutes about 90% of the overall state tax revenues, ICMS-E constitutes a sizeable source of revenues for municipalities. The ICMS Ecologico was first adopted by the state of Paraná, in 1992. Similar schemes have since been introduced in many Brazilian states nationwide.³⁴⁸

A significant aspect of this financial incentive mechanism is that the introduction of ICMS-E has changed the way local communities and governments view protected areas. Instead of seeing them as obstacles to development, they are seen as new opportunities to generate additional revenues. The largest contribution in terms of expanded conservation areas has come from the establishment by municipal governments of "environmental protection areas." These developments have also influenced states where such pro-conservation policies were not in place to adopt similar incentive mechanisms. Such a shift in thinking was also one of the motivations behind many states establishing new protected areas and improving the management of existing ones.³⁴⁹ Proponents of the scheme also argue that it has improved relations between rural communities and environmental agencies.

³⁴⁶ <http://www.wildwildleft.com/tag/COMACO>

³⁴⁷ For example, Brazil accounts for nearly three-quarters of all protected areas established around the world between 2003 and 2009 (Pauli *et al.*, 2010).

³⁴⁸ TNC, A genuine Brazilian Incentive for Conservation (2012).

³⁴⁹ In the state of Paraná for example, the area of conservation units grew by 165% in the nine years following the introduction of ICMS-E in 1992. In 2000 alone, over one million hectares of land were declared as new conservation units in Paraná (Pauli *et al.*, 2010).

Another major aspect of this ICMS mechanism is the way an existing system of transferring money between states and local governments has been used effectively, resulting in low transaction costs. Brazil's ICMS-E model has been advanced as a blueprint for distributing global funds to developing countries for their efforts toward conserving and sustainably managing environmental resources.

VIII. Mexico: Direct Payments for Forest Ecosystem Services

In 2003 the Mexican government initiated a programme of payments for hydrological services (known as PSA-H) to address problems of severe water scarcity and high deforestation. Such a system of paying individuals and communities to conserve forestlands that would otherwise have been converted to alternative land uses is particularly important to Mexico, where about 70% of forest lands are communally owned. Although carbon sequestration, biodiversity conservation and agroforestry services were also established later to complement PSA-H, the hydrological services component continues to be the largest and the most popular.³⁵⁰

A key factor promoting the uptake of the programme has been the creation of a link between the providers of environmental services and those who benefit from them.³⁵¹ Funding for the PSA-H is met through a fee charged to downstream water users³⁵² and payments are made directly to landowners. The application process for incentive payment was very simple — all it required was a two-page form and proof of ownership. For ejidos,³⁵³ a document verifying the voting of the community following a general assembly was needed. Selection of properties followed simple criteria of the parcel: 1) has at least 80% tree cover, 2) draws from overexploited aquifers and 3) is near a population center with greater than 5,000 inhabitants. Removal of trees from the agreed upon areas constituted a contract violation, and contracts were assessed and renewed on an annual basis based upon compliance.³⁵⁴

Active involvement of local communities in the design and implementation of the programme is another factor that is said to have contributed to its significant improvement over the years. Besides rendering greater recognition of a community role in sustainable land management, some of these improvements include changes in the structure of payments and procedural rules to better reflect the quality of forest being protected. Similarly, more precise forest management and conservation practices and selective targeting of areas (for example, montane cloud forests) are now being accorded higher priority.³⁵⁵

³⁵⁰ Muñoz-Piña et al., Paying for the hydrological services of Mexico's forests: Analysis, negotiations and results (2008).

³⁵¹ The scientific evidence of the link between protection of forests and increased water availability is very complex.

³⁵² Additional support for payments came from state and other government sources and international funding.

³⁵³ Communally held lands in the traditional system of land tenure that combines communal ownership with individual usage.

³⁵⁴ <http://are.berkeley.edu/~esadoulet/papers/FAOPESreport.pdf>

³⁵⁵ Pauli et al., Natural capital: The new political imperative (2010).

The more interesting aspect of the PES programme is how different actors view it differently and how they try to reshape it according to their objectives and priorities. While some activists endeavor to transform it as a major means to render social justice, other leaders see it as a source of emergency funds for farmers in distress and as an opportunity to highlight the environmental values of low-intensity, smallholder agriculture and land management practices to state agencies and urban Mexicans.³⁵⁶ These perceptions of the PES programme are much different from that of the original design's emphasis on market-based payments. With the PES payments rendering substantial financial benefits to communities and families, the poverty alleviation component of the PAS-H has now come to play an increasingly greater role at the national level.³⁵⁷

IX. Kenya: The Kasigau Corridor REDD+ Project

The Kasigau Corridor Project, located in Coast Province, Kenya, received the world's first REDD+-based carbon offset credits under the Voluntary Carbon Standard (VCS).³⁵⁸ The project area is a private leasehold estate given by the Government of Kenya to a ranching company and consists of primarily low-density forestland, shrubland and grassland savannah. Located between two National Parks, the area also functions as a critical wildlife corridor. Endeavoring to protect about 500,000 acres of dry land forests in its second phase, and estimated to reduce over a million tonnes of CO₂-e per year, this project is classified as a mega-project by VCS.

The project was validated against the VCS' most recent REDD+ methodology for addressing *Avoided Mosaic Deforestation of Tropical Forests*. Recognizing the project's environmental and social benefits, the credit issuance is also backed by validation under the Climate, Community and Biodiversity (CCB) Standard. The project received significant initial support from private financial institutions, which also demonstrates that large REDD+ projects can attract private investment.

As the methodology's flagship project, the project is said to address the "mosaic" pattern of deforestation that arises due to the operation of many drivers of deforestation. Major project activities focus on protection of the wildlife and its habitat and carbon stocks. It also aims to bring the benefits of direct carbon financing to surrounding communities by undertaking activities to mitigate human-wildlife conflicts and to promote alternative livelihoods, agricultural outreach and education.³⁵⁹

Although the realization of this project is considered a watershed moment for voluntary or Over-the-Counter Market REDD+ projects, according to another report³⁶⁰ the Plan Vivo Standard,³⁶¹ which caters to smaller community-based and high conservation value projects, was the first to

³⁵⁶ K. McAfee and E.N. Shapiro, *Payments for ecosystem services in Mexico: Nature, neoliberalism, social movements, and the state* (2010).

³⁵⁷ Annual federal funding for the program increased from USD 16.9 million in 2003 to a peak of USD 65 million in 2007 (McAfee and Shapiro 2010).

³⁵⁸ www.forestcarbonportal.com/project/kasigau-corridor-REDD-project

³⁵⁹ <http://www.theREDDdesk.org/fr/node/5048>

³⁶⁰ <http://www.forestcarbonportal.com/content/kenyan-carbon-project-earns-first-ever-voluntary-redd-credits>

³⁶¹ <http://www.planvivo.org/>

issue credits to a REDD+ project. However, in terms of sheer size, the Kasigau Corridor project is by far the largest.

The importance REDD+ received at the UNFCCC negotiations in Copenhagen and Durban is particularly attributed to the growing interest and greater confidence of investors in REDD+ projects. These developments are also expected to support REDD+'s potential role in the officially approved mechanisms like the CDM or the ones expected to emerge post Kyoto. Carbon credits from REDD+ projects in Mexico and Brazil are also being explored for future trading in California's new cap-and-trade scheme. It must however be noted that while many national and sub-national governments are taking an active interest in promoting REDD+, currently there are no officially accepted criteria or standards to account for emissions reductions from forests.

X. Guatemala: Forest Finance Intelligence Unit

Very often the forestry and financial sectors' limited knowledge of each other becomes a major constraint to mobilizing financial resources for forestry. The NFP Facility, in close collaboration with FAO and other development partners, helps to address this challenge by facilitating active collaboration between forest and financial stakeholders toward the development of the National Forest Financing Strategies (NFFS) in several partner countries. In Guatemala the NFFS was approved by the Board of Directors of the National Institute of Forest (INAB) and is being implemented by a specially established Forest Finance Intelligence Unit³⁶² within the forest department (INAB).

The Unit has three working pillars: (i) Mobilization of private sector resources, both national and international, towards productive chains (small, medium and large) (ii) Mobilization of public policy resources, through the following actions: design and feasibility of a programme of credit guarantees to reduce risks to forest based small enterprises; design of an investment fund related to schemes for PES; evaluation and re-engineering of existing instruments, for example the Program of Forest Incentives. (iii) Mobilization of global resources through meetings between foresters and investors and harmonization of the actions of the NFFS with other national and global financial strategies.

The Unit is developing strategies to provide reliable information on forest finance, build needed capacities of foresters and finance professionals and facilitate the development of pre-investment initiatives (business cases). In particular, it identified an absence of methodologies to accurately assess the value of forest assets and future earnings as a major constraint to forest investments. Enhanced communication and knowledge sharing among key stakeholders is achieved through joint goal and priority setting, formation of multidisciplinary working groups and organization of joint field trips.

This collaborative work of key stakeholders in the country has also helped to increase the visibility of the forest sector and identify opportunities to create linkages between large and small producers through private-private partnerships. As a consequence of the improved dialog

³⁶² <http://www.nfp-facility.org/66206@149872/en/>

among key stakeholders, a National Alliance of Community Forest Organizations was formed to provide a forum for 11 umbrella organizations and 400 grassroots organizations to have a larger say in the design and implementation of forest financing programmes such as REDD+ and PINFOR (Programa de Incentivos Forestales).

PINFOR is an incentive programme initiated by the government of Guatemala in 1997 to promote forestry. It is financed using 1% of the state operating expenses. As of 2009, it provided about USD 134 million to the forest sector and helped establish about 100,000 hectares of plantations.³⁶³ Although PINFOR was effective in stimulating private forest investments, some hurdles were observed that impaired its performance. These include allocation of lesser amounts than those established by the law, insistence on proving landownership to receive programme benefits, and lack of flexibility to accept contributions from other resources (e.g., bilateral and multilateral grants and loans).

Recognizing some of these challenges, Guatemala has established another incentive programme, PINPEP, a forest incentive programme for smallholders with areas of less than 15 hectares,³⁶⁴ with the support of the Netherlands. From conception to approval by Congress it took only two years to pass the PINPEP (compared to eight years for PINFOR). While in 2012 about USD 6 million will be distributed to small farmers, communities and indigenous groups that have land possession (but no ownership title) under 15 hectares, by 2013, USD15 million are expected to be distributed benefiting over 400,000 people directly.³⁶⁵

XI. Towards Equitable Forest Industry and Small Forest Holder Partnerships

Forest industry and forest/tree farmer partnerships, most commonly seen as out-grower schemes, contract farming, or buy-back arrangements, represent a form of integrated value-chain financing whereby a buyer higher up the chain provides financing for a producer lower down the value chain. Under such schemes, farmers undertake production and management of trees and other forest products for a company that is engaged in their processing and trade. These schemes particularly allow smallholders to access finance for investment in plantations and/or to access input supplies. They also often provide technical support for production, and most importantly they offer a guaranteed, if not always equitable, market for the outputs. Financing comes in the form of loans (cash advance payments, or in-kind loans, with or without interest) that are repaid upon harvest when the smallholder sells the produce as agreed earlier. As such, out-grower schemes offer a formidable answer to the constraint of long gestation faced by the forest sector.

Out-grower schemes have been an important feature of forestry and agro-forestry development policies in many parts of the world. Yet these policies are so complicated that depending on how the incentive structures finally shape up, they can make or mar the fortunes of the small farmers. While these mechanisms can be left to the free play of market forces, no country in the world has

³⁶³ M. Boscolo et al., *Financing sustainable small-scale forestry: lessons from developing National Forest Financing Strategies in Latin America* (2010).

³⁶⁴ <http://www.inab.gob.gt>

³⁶⁵ Jhony ZapataAndia, National Forest Programme Facility, personal communication.

in fact done so, in a strict sense. And how the government intervenes in the overall architecture of these incentives has profound implications. Paper and pulp companies, for example, can establish their own plantations or get concessions from government forests to ensure supplies to their mills. While land ceiling laws such as those in India prevent the establishment of large-scale plantations, in many countries, banning of raw material supplies from state forests to private industries has forced the development of plantations on small farms and community lands. The tenure and other resource rights of farmers and communities can have a big role in shaping the overall deal. In particular, forestry companies are required honor the legal, customary and other obligations of local communities in many countries.

In Indonesia for example, even in areas where government leases to large forest areas exist, partnerships with small forest holders have often emerged as a consequence of frequent conflicts between local communities and these companies. In contrast, small forest holders in Vietnam hold stronger bargaining power “to act more independently and be more profit-oriented,” due to their tenure security.³⁶⁶ Over a quarter of Vietnam’s total forest area (around 3.3 million hectares) is held by households or communities,³⁶⁷ and by 2009 more than a million households were given certificates of land ownership.³⁶⁸

Yet more than the tenure, the demand for raw materials (partly due to the banning of supplies from state forests) by the vibrant forest products industry, which has shown a double digit annual growth in recent years, is often attributed to the growth of the small forest holder sector in Vietnam. Reduced import tariffs can flood the local markets with cheap imports and suppress the prices of domestic products and consequently, their supply. Governments can also impose restrictions such as planting of only native species, to ensure that natural forests are not replaced by fast growing exotics. Such policies could impose additional costs to farmers.

XII. Costa Rica: National Forestry Financing Fund (FONAFIFO)

Since the end of World War II, Costa Rica has gone through one of the highest deforestation rates in Central America and had lost approximately 80% of its forests at one point of time.³⁶⁹ However, today, over half of Costa Rica’s existing forest cover is under the protection of national parks, biological reserves, or wildlife refuges. Deforestation remains a major threat in the other half, which is privately owned. As a major measure to address this challenge and further augment its forest resources, Costa Rica established FONAFIFO (National Forestry Financing Fund) in 1996, which is recognized worldwide as a major financial mechanism for mobilizing resources to protect and conserve forests and their ecosystem services. This full-fledged, mixed private-public, decentralized entity has evolved out of earlier measures such as the enactment of the Forestry Law in 1990 and the creation of the National Forestry Financing Fund in 1991. FONAFIFO operates within the organizational structure of the State’s Forestry Administration

³⁶⁶ Y. Yasmi et al., Working for People and Nature (2010). While the efforts of initiatives such as the REDD+ Partnership’s Voluntary REDD+ Database (VRD) have provided increased clarity on international REDD+-related funding, there is a need to improve the reliability of the data and increase the coverage to a wider range of forest themes, contained in the forest instrument.

³⁶⁷ RECOFTC, People, forests and climate change mitigation. Viet Nam: Why REDD+ needs local people (2010).

³⁶⁸ UN-REDD Programme, Viet Nam UN-REDD National Programme Document (2009).

³⁶⁹ http://en.wikipedia.org/wiki/Deforestation_in_Costa_Rica#cite_note-1--1

with relative autonomy and ability to administer funds with the assistance of a Board composed of five members (two private sector and three public sector representatives).³⁷⁰

FONAFIFO implements the Costa Rican Payment for Ecosystem Services (PSA) programme and channels incentive payments for the services rendered by forests for the protection and enhancement of the environment, which consists of: greenhouse gas mitigation, watershed protection, biodiversity conservation and preservation of scenic beauty. It makes periodic payments to private land owners, which range from approximately USD 41 per hectare per year for natural regeneration to over USD 980 per hectare over a five year period for new forest plantations based on pre-established contracts. The payments also include per tree contracts for agroforestry.³⁷¹

The most important feature of the programme however is the diverse and multiple ways it mobilizes money. The flexibility and adaptability of the PSA programme to allow bilateral agreements with private companies and public utilities further complements the efforts of FONAFIFO. In particular, the Environmental Services Certificate, an innovative instrument specially created, makes it possible to raise funds from private individuals and businesses interested in protecting ecosystem services in an area. These funds are matched with government funds, bilateral and multilateral grants and loans. The government's share largely comes from taxes such as a fossil fuel tax. Buyers of forest ecosystem services include, for example, hydroelectricity and ecotourism companies. Several regional organizations also play important roles in facilitating these transactions. In addition to the successful mobilization of funding from a variety of sources and innovative mechanisms, the Costa Rican case is also credited with efficiency and honesty in the use funds generated.³⁷²

XIII. The CBD LifeWeb Initiative

Well managed protected areas act as cornerstones of biodiversity conservation and provide vital ecosystem services on which we rely for human wellbeing. The need for increased financial resources to support protected areas is recognized by the decisions of the Parties to the Convention on Biological Diversity and support is increasing from Parties, public donors and private foundations. Adequate funding for the creation and management of the global network of protected areas not only protects ecosystem services, but also safeguards the future of the planet's biodiversity and provides demonstrably significant return on investments.

The Convention on Biological Diversity's LifeWeb Initiative³⁷³ strengthens financing for protected areas to sustain biodiversity, secure livelihoods and address climate change, through implementation of the CBD Programme of Work on Protected Areas. It provides value-added to international development cooperation by:

³⁷⁰ <http://www.fonafifo.go.cr/>

³⁷¹ http://www.ecosystemmarketplace.com/pages/dynamic/web.page.php?section=water_market&page_name=crwb_market

³⁷² T. Herbert et al., Environmental Funds and Payments for Ecosystem Services, RedLAC Capacity Building Project for Environmental Funds (2010).

³⁷³ www.cbd.int/lifeweb

- Enabling recipient countries to profile their financing priorities to multiple donor partners;
- Assisting donors to access information about recipient countries' financial priorities and coordinate counterpart funding opportunities with others; and
- Providing global recognition of financial commitment and progress in implementing relevant international commitments.

The range of services provided to protected area donors and recipient partners includes:

- An easy to use website clearinghouse;
- Assistance with establishing partnerships that meet the needs of donors and recipients;
- Co-hosting of financing round table processes at regional and national levels to mobilize funding; and
- Coordination of media, communications and high-profile events to promote and encourage successful partnerships.

XIV. The Bhutan Trust Fund for Environmental Conservation

Few countries in the world match the Kingdom of Bhutan in terms of richness of biodiversity, the proportion of land set aside for conservation and the strong steps taken to maintain natural resources. Bhutan has the highest proportion of forest cover of any nation in Asia and has pledged to maintain, in perpetuity, at least 60% of its land as forests. Most importantly, in the Bhutanese context, it is the ethical and cultural roles of nature and biodiversity that play a central role. While these factors provide a strong motivation and opportunity to keep the nation's outstanding natural resource base largely intact, the need to sustainably transition from subsistence to a more modern economy often proves an immense challenge to Bhutan.³⁷⁴

Renewable natural resources continue to be the most important sector and contribute a significant share of the gross domestic product. Yet the country follows a cautious approach, prioritizing conservation of natural heritage over realization of economic benefits at its expense. As a major step in achieving a balance and ensuring long-term financing for conservation, Bhutan established the Bhutan Trust Fund for Environmental Conservation (BT FEC) in 1992.

Considered the world's first environmental trust fund, BT FEC is an endowment of USD 20 million set up as an innovative mechanism to finance conservation programmes over the long term. Donors to the trust fund include the World Wildlife Fund and the Global Environment Facility and the governments of Bhutan, Denmark, Finland, the Netherlands, Norway and Switzerland. With its legal incorporation under the Royal Charter of 1996, the BT FEC operates as an autonomous conservation grant making organization with day-to-day business conducted by a small secretariat. There is an annual spending limit (currently 2.5% of the endowment), which is based on the endowment's valuation at the end of the preceding fiscal year.

³⁷⁴ <http://www.bhutantrustfund.bt/>

Areas eligible for grants to Bhutanese individuals and institutions include basic research, climate change, conservation awareness and education, integrated water resource management and economic development issues that directly impact natural environment.

The overall contribution of the fund to the development of the legal, institutional and operational framework for environmental protection and biodiversity conservation in Bhutan has been observed to be tremendous. The BTFEC has also demonstrated to the world a major means of effectively financing sustainable natural resource management, as evidenced from its financial performance. As of June 2011 it had received revenue of USD 31.58 million since 1996, and its assets were valued at USD 45 million.⁴⁰ The Trust is said to have significantly benefited the country's scientific and management capability for conservation over the years. The main factors attributed to the success of the BTFEC include strong local governance with independent professional investment advice, leveraging of some of the programmes with other external funding, strong credibility conferred due to high-level membership on the board,³⁷⁵ and efficient functioning of its secretariat.

³⁷⁵ L. Emerton et al., *Sustainable Financing of Protected Areas: A global review of challenges and options* (2006).