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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>AGF</td>
<td>Advisor Group on Finance</td>
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<tr>
<td>APIP</td>
<td>Agency for the Promotion of Private Investment</td>
</tr>
<tr>
<td>CAMPFIRE</td>
<td>Community Areas Management Programme for Indigenous Resources</td>
</tr>
<tr>
<td>CAS</td>
<td>Country assistance strategy</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CBFF</td>
<td>Congo Basin Forest Fund</td>
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<tr>
<td>CER</td>
<td>Certified emission reduction</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<tr>
<td>CFR</td>
<td>Central forest reserve</td>
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<tr>
<td>CIF</td>
<td>Climate Investment Fund</td>
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<td>CRS</td>
<td>Creditor Reporting System</td>
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<td>CTF</td>
<td>Clean Technology Fund</td>
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<td>C2D</td>
<td>Debt Development Contract</td>
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<tr>
<td>DAWASCO</td>
<td>Dar es Salaam Water Supply and Sewerage Corporation</td>
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<td>DNS</td>
<td>Debt-for-nature swap</td>
</tr>
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<td>DRC</td>
<td>Democratic Republic of the Congo</td>
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<td>EAMCEF</td>
<td>Eastern Arc Mountains Conservation Endowment Fund</td>
</tr>
<tr>
<td>ECPF</td>
<td>Environmental Conservation and Protection Fund</td>
</tr>
<tr>
<td>EDB</td>
<td>Ease of Doing Business</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
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<td>EITI</td>
<td>Extractive Industries Transparency Initiative</td>
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<td>ENR</td>
<td>Environment and Natural Resources</td>
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<td>EPWS</td>
<td>Equitable Payments for Watershed Services</td>
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<td>ES</td>
<td>Environmental services/Ecosystem services</td>
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<td>FAF</td>
<td>Fond d’Aménagement Forestier</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FC</td>
<td>Financial Cooperation</td>
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<td>FCCCC</td>
<td>Framework Convention on Climate Change</td>
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<td>FCPF</td>
<td>Forest Carbon Partnership Facility</td>
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<td>FDI</td>
<td>Foreign direct investment</td>
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<td>FF</td>
<td>Fond forestier</td>
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<td>FFTD</td>
<td>Fund for Forest and Tourism Development</td>
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<td>FIP</td>
<td>Forest Investment Programme</td>
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<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade (of the European Union)</td>
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<td>FMCF</td>
<td>Forest Management and Conservation Fund</td>
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<td>Forest Plantation Fund</td>
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<td>FRA</td>
<td>Forest Resources Assessment (of the Food and Agricultural Organization of the United Nations)</td>
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<td>FSDF</td>
<td>Fonds Spécial de Développement Forestier</td>
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<td>FTF</td>
<td>Forest Trust Fund</td>
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<td>Fondation Tany Meva</td>
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<tr>
<td>FTS</td>
<td>Fondation Trinational de la Sangha</td>
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<tr>
<td>FWDF</td>
<td>Forest and wildlife development fund</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>HIPC</td>
<td>Heavily indebted poor countries</td>
</tr>
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<td>IFC</td>
<td>International Finance Corporation</td>
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IIED  International Institute for Environment and Development
IGES  Institute for Global Environmental Strategies
ITTO  International Tropical Timber Organization
IUCN  International Union for Conservation of Nature
IWC  International Woodland Company
KWSF  Kenya Wildlife Service Fund
LDCs  Least developed countries
LFCC  Low Forest Cover Countries
LFF  Lesotho Forest Fund
LMDA  Logging and Miscellaneous Deposit Account
MBF  Fondation pour les Aires protégées et la biodiversité de Madagascar (Madagascar Biodiversity Fund)
MEET  Malawi Environmental Endowment Trust
MMCT  Mulanje Mountain Conservation Trust
MMCO2e  million metric tons of carbon dioxide equivalent
MTEF  Medium-Term Expenditure Framework
MUSD  Million United States dollars
NAFORMA  National Forestry Resources Monitoring and Assessment (project in Tanzania)
NAPA  National Adaptation Plan of Action
NDP  National Development Plan
NFDF  National Forest Development Fund
NFF  National Forest Fund
NFFS  National Forest Financing Strategy
NFP  National forest programme
NFRAT  National Forest Recreation Access Trust
NGO  Non-governmental organizations
NWFP  Non-wood forest products
ODA  Official development assistance
OECD  Organization for Economic Cooperation and Development
PES  Payment for ecosystem services
POP  Persistent Organic Pollutants
PPP  Public-private partnerships
PREM  Poverty Reduction & Environmental Management Programme
PROFOR  Programme on Forests (of the World Bank)
PRSP  Poverty Reduction Strategy Paper
PWS  Payment for watershed services
REDD+  Reducing Emissions from Deforestation and Degradation
REF  Regie d’Exploitation Forestiere
RF  Reforestation Fund
R-PP  Readiness Preparation Proposal
R&D  Research & Development
SEB  Skandinaviska Enskilda Banken
SFC  Strategic Climate Fund
SFM  Sustainable forest management
SIF  Seychelles Island Foundation
SIP  (Environment and National Resources) Sector Investment Plan
TEV  Total Economic Value
TFF  Tanzania Forest Fund
TFS  Tanzania Forest Service
TIMO  Timberland Investment Management Organizations
TMF  Table Mountain Fund
UN  United Nations
UNCTAD  United Nations Conference on Trade and Development
UNEP  United Nations Environment Programme
UNFCCC  United Nations Framework Convention on Climate Change
UNFF  United Nations Forum on Forests
<table>
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<tr>
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<td>United States dollar</td>
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<td>Uganda Timber Growers Association</td>
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<td>UWA</td>
<td>Uganda Wildlife Authority</td>
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<td>VCS</td>
<td>Verified Carbon Standard</td>
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<td>VRD</td>
<td>Voluntary REDD+ Database</td>
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<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WBCSD</td>
<td>World Business Council for Sustainable Development</td>
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<td>WfW</td>
<td>Working for Water programme</td>
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PREFACE

This report was prepared by Indufor Oy at the request of the United Nations Forum on Forests Secretariat (UNFFS). The project involved a study on forest financing and investments in Africa. This report covers the issues mentioned in Chapter 1.2 (Objectives and scope) and contains the opinions of Indufor and material based on other sources.

Indufor Oy

Karoliina Lindroos  Jyrki Salmi
Senior Consultant  Managing Director

Contact:
Indufor Oy
Töölönkatu 11 A, 3rd Floor
FI-00100 Helsinki
FINLAND

Tel. +358 9 684 0110
Fax +358 9 135 2552

indufor@indufor.fi
www.indufor.fi
EXECUTIVE SUMMARY

Africa contains a significant proportion, 17 per cent, of the world’s forests, and finding solutions for adequate, timely and sustainable financing of the continent’s forest resources is imperative. This study on forest financing in Africa aims to i) improve understanding of the present forest financing flows and the demand for financing, ii) identify challenges and iii) identify lessons and success stories in mobilizing additional financing for sustainable management of forests in Africa. The study is part of the continued efforts of the United Nation Forum on Forests Secretariat concerning the Facilitative Process and the Global Objectives on Forest mechanisms.

The study methodology is a desk top review with extensive data mining for available information. The study is augmented by country case studies from Tanzania, Tunisia and Uganda. One significant finding related to data is the prevailing limitation of data on private sector financing and investments and on cross-sectoral flows. The better availability of information on foreign public financing might skew the overall image of the financing landscape.

In African countries, forests and trees receive political attention, at least on the development agenda. In most African countries, forests are mentioned in Poverty Reduction Strategy Papers. However, macro-level economic growth strategies do not usually forestry as one of the priority sectors of the economy. Countries that together cover the majority of Africa’s forests do not even mention forests in their national economic growth plans or strategies, whereas other land-based sectors, e.g. agriculture, mining, and tourism, are often prioritized in them.

It is challenging to convince decision makers at the very top to increase resourcing when forest revenues are small and only a fraction of the potential revenue is collected. In comparison to other regions of the world, African countries collect on average less public revenue. The revenue is collected by only few countries, which means that most countries collect limited public revenue from forest resources. Also, public expenditure on forestry is low, and the vast majority of domestic expenditure goes towards covering operating expenditure (e.g. staff costs). Consequently, from a public financing perspective, the forest resource represents a net expenditure, and as such does not encourage public investment in forests and trees.

In many African countries, foreign financing accounts for a significant share of the total public forestry expenditure. Global forestry ODA has increased significantly from 2009 to 2010, and African countries have also benefited from this trend. Historically, in terms of forestry ODA flows, the African countries have come second after Asia and before Latin America and the Caribbean. However, with the increase in forestry ODA in 2010, Latin American and Caribbean countries have significantly benefited, but African countries have lagged behind. This is likely linked to the significant increase in REDD+ financing starting in 2010 because regionally, REDD+ financing has targeted Latin America and Asia more than Africa. Both financing modalities are focused on relatively few recipients. The emergence of significant financing for forest carbon creates opportunities. However, based on current available information on REDD+ support, all countries will not benefit equally from these opportunities.

Africa has notable private sector plantation investments. However, private sector investments are concentrated in few countries: only five countries account for half of the investment. There is a research, education and training gap in both domestic and foreign public financing. The private sector has the opportunity to bring in not just money but also knowhow, technology, and investment into research and development (R&D) and improved production techniques. This emphasizes the need for domestic efforts and investment to
improve the investment environment, which in turn would mobilize private sector finance and related benefits.

In many African countries, forests and trees have a seemingly low contribution to the economy, which can lead decision makers to accord low priority to the sector. Many forest products and services are non-monetary, and numerous economic activities related to forest and trees are carried out in the informal sector. The lack of information and acknowledgement of the total economic value of forests and trees results in the undervaluation of and low political attention to the sector. Further, it is challenging to attract decision makers’ attention when cross-sectoral coordination is limited and the cross-sectoral linkages and contributions are poorly articulated. This hinders the recognition of the value created by forests and trees which is currently recorded under other sectors.

The domestic demand is increasing rapidly for wood products, and small- and medium-scale tree growers have much untapped potential in supplying the market. However, key challenges related to secure land tenure, organization of producers groups and access to finance and risk mitigation need to be solved. For example, public private partnerships and outgrower schemes can support small producers’ access to finance and risk mitigation, technical capacity building, and high quality inputs. New innovations in technology, logistics and market access will be required to fully tap the small- and medium-scale grower potential and solve the related challenges. For instance, through mobile banking and other new solutions the ICT sector can play a significant role in introducing new tools to facilitate financing to rural inhabitants.

There are various regional and sub-regional bodies available in Africa that provide, or could provide, a platform for regional cooperation in natural resource management. The experience and lessons from successful cases, such as The Yaounde Summit and The Central African Forest Commission (COMIFAC), need to be studied in depth so that they can guide other regional and sub-regional efforts for improving cooperation in natural resource management and generating related financing.
1. INTRODUCTION

1.1 Background

Although the ecological, economic, social and cultural values of forests have been recognized in various global forums\(^1\), sufficient financing to conserve, protect and sustainably manage forests and trees is not yet available. For example, *The Economics of Ecosystems and Biodiversity* study (2009) estimates the annual cost of forest loss at between USD 2 trillion and USD 5 trillion. Also, the Eliasch Review (*Climate Change: Financing Global Forests* (2008)) estimated that the opportunity cost of Reducing Emissions from Deforestation and Forest Degradation (REDD+) and sustainable forest management (SFM) could range from USD 15 to 33 billion per year, most of which would be needed in developing countries. At the same time, the supply of forest official development assistance (ODA) has been 0.5-1.2 billion yearly (Creditor Reporting System (CRS) between 2007 and 2010), which is less than one per cent of all ODA. It is clear that the bulk of the funding needs to come from sources other than development aid. The rapid deterioration of forest resources and the depletion of natural capital require new measures for increasing recognition of forest ecosystem services and for including those in prices for commodities and services.

Alongside recognition of the multiple values of forests and trees, increasing attention has been directed to cross-sectoral linkages between forests and other sectors that affect the forest resource. In this context, the multiple values of forests and their partially non-monetary nature require careful analysis and informed decision-making so that true net benefits to society are realized. This requires investments into the valuation of the total economic value of forest goods and services benefiting societies at local, regional and international levels. It also requires investment into capacity building so that the cross-sectoral aspects can be integrated into national policies at all levels, and into institutional structures so that the policies can be applied.

In October 2009, the Member States of the United Nations Forum on Forests (UNFF) adopted a decision on means of implementation of SFM during a special session of the ninth session of UNFF. The decision launched two initiatives to catalyse funding for SFM. The Forum established the Intergovernmental Ad Hoc Expert Group, which analyses existing financing strategies for SFM and explores ways to improve access to funds, including the option of establishing a voluntary global forest fund. The second initiative is a “facilitative process” mechanism for forest financing to assist countries to mobilize funding from all sources. The Facilitative Process addresses the special needs of countries that have faced a 20-year decline in forest financing. This study on forest financing in Africa is part of the continued efforts of the United Nation Forum on Forests to systematically continue work related to the Facilitative Process and Global Objectives on Forest mechanisms.

The 54 African countries included in this study are diverse. The continent has for instance 15 landlocked countries and 6 small island developing states (SIDS). Nevertheless, one common factor is that many African countries have a high poverty rate, even those endowed with vast natural resources, such as minerals (most notably oil, gas, platinum, diamonds, gold and silver), forests and fertile land. Thirty-three countries are least developed countries (LDCs), and most of the rest are lower-middle income countries. Moreover, the countries mainly have a low Human Development Index (HDI), a low gross domestic product (GDP) per capita and a high degree of inequality in income and wealth.

Africa hosts a significant share of the world’s forests, 17 per cent. The continent’s forest resources are diverse, ranging from Upper Guinean and Congo Basin rainforests to Miombo woodlands, savannahs and mangroves. In addition, several biodiversity hotspots are located on the continent. In contrast to the significance of forest resources on a global scale, a

\(^1\) These global forums include e.g. the UNFCCC, CBD, UNCCD, and UNFF
relatively minor amount of foreign financing and investments pertaining to forests is directed to Africa. Much of the global foreign direct investment favours other regions. Regarding foreign direct investment (FDI) into the forest sector, Asia and Latin America have so far attracted the bulk of commercial plantation investment, while relatively little investment has been directed to Africa. In terms of public foreign funding, Africa used to be second largest forest ODA recipient but has been recently surpassed by Latin America. Hence, in terms of forest sector ODA, both Asia and Latin America are currently prioritized over Africa. Also, domestic forest revenue and expenditure are low in Africa in comparison to other regions of the world.

1.2 Objectives and scope

This study, “Forest Financing in African Countries”, aims to map out sources, trends and emerging modalities of forest financing in African countries. The study was commissioned to Indufor by the United Nations Forum on Forests Secretariat. It aims to present current financing flows, demand and gaps, conditions for an enabling environment for forest financing and investment, and strategies for enhancing financing flows for forests and trees. Additionally, as financing relevant to forests and trees can also take place under other relevant sectors, emphasis is placed on illuminating the cross-sectoral linkages and the corresponding implications for forest financing.

This study process includes eight papers in total: four concerning Africa and four concerning LDCs. For each country group, there are two macro-level papers and two country case studies. The first set of macro-level papers establishes the background, analyzing data on physical and human geographical characteristics, socio-economic features, forest resources, institutional aspects and policy frameworks. Data on cross-sectoral linkages of all countries in each group were also analyzed. The second set of macro-level papers analyses sources and allocation of forest financing, gaps and enabling conditions for financing of forests and trees, and new and innovative financing strategies.

The country case studies aim to present forest resources, policy and institutional framework characteristics, the role of forests in the economy, inter-linkages between forestry and other sectors, the forest financing landscape and the key challenges and opportunities for financing forests in the respective country. The country case studies are both stand-alone study papers and also feed into the macro-level papers.

The case countries are Nepal (non-African LDC), Uganda and Tanzania (African LDCs) and Tunisia (African non-LDC). These case studies focus on issues common as well as specific to their respective country group, and thus are connected and consistent with the macro-level papers.

This second macro-level paper on Africa covers all countries of the continent that are recognized by the United Nations.

1.3 Methodology and data

The study identifies the existing and potential financing sources for forests in Africa. Financing patterns and modalities are elucidated in conjunction with different types of financing sources: domestic public budgetary and extra-budgetary financing, domestic and foreign private sector financing, official development assistance; and flows related to REDD+, payment for ecosystem services (PES) and other potential sources. The studies have been carried out as a desk top review and data collected via extensive data mining, review of existing information and country case studies. In addition, Indufor in-house databases, such as the Plantation Database, have been used.
Data for this second macro-level study have been compiled mainly through various internet sources from Governments, the Food and Agriculture Organization of the United Nations (FAO), the World Bank (WB), the Organization for Economic Cooperation and Development (OECD), multiple United Nations organizations and the Global Environment Facility (GEF).

The main quantitative data sources are as follows:

- Data on forest revenue and expenditure is gathered from FAO Forest Resources Assessment (FRA) 2010
- Data on ODA is compiled from the Creditor Reporting System\(^2\) of OECD
- Data on thematic financing for the Rio Conventions is compiled from the GEF project database\(^3\)
- Data on REDD+ financing is principally gathered from the Voluntary REDD+ Database\(^4\) and Climate Funds Update\(^5\)
- Data on foreign direct investments is derived from the United Nations Conference on Trade and Development (UNCTAD)\(^6\) and from Indufor’s in-house plantation database

It must be noted that documentation and data on cross-sectoral linkages between forestry and agriculture, energy, transport, extractive industries, tourism, environment, and other relevant sectors have been particularly challenging to obtain. Compiled data on cross- or inter-sectoral financing flows, or complete data on domestic and foreign private investment and financing are not readily available. In general, data availability is detailed as follows.

Data that is available:

- Domestic expenditure and revenue (not for all countries)
- ODA flows
- GEF financing
- REDD+ financing flows
- Forest Law Enforcement, Governance and Trade (FLEGT) financing flows
- Plantation investments

Data that is not available:

- Private sector domestic and foreign investment and financing
- Cross-sectoral financing patterns (inflow and outflow)

The reader should note that the better availability of foreign public financing data might result in a skewed image of the actual financing landscape.

\(^2\) http://stats.oecd.org/index.aspx?DataSetCode=CRS1
\(^3\) http://www.thegef.org/gef/gef_projects_funding
\(^4\) http://reddplusdatabase.org/
\(^5\) http://www.climatefundsupdate.org/
\(^6\) http://unctadstat.unctad.org
2. PRESENT FINANCIAL FLOWS FOR SFM

2.1 Domestic public financing

Revenue and expenditure\(^7\)

Governments both collect revenue from the forest sector and invest public funds in the sector through budget allocation processes and possible forest-relevant funds. Public revenue in the forest sector comes mainly from fiscal sources (taxes and duties), other fees, charges and levies and from sales of timber and other forest products from the public forests and from service provision by the public institutions. Public expenditure can be categorized into operating expenditure, which covers the cost of running forest administration (e.g. staff salaries), and implementation expenditure, which relates to carrying out planned activities.

According to FAO (2010), globally speaking Governments collect forest revenue\(^8\) of USD 4.6 per hectare (ha) on average, while the public expenditure\(^9\) on forest is USD 7.3 per hectare on average. Consequently, on average, Governments spend more on forestry than they collect in revenue.

To observe country-level forest revenue and expenditure data, FAO FRA 2010 is used because it is the largest available data set on the issue and allows comparisons between regions and within Africa. As also noted by FAO (2010), comparisons are indicative at best, as the data is impacted by various issues such as a Government’s ability to collect revenue, forest management objectives, forest area and forest tenure.

The revenue collection varies between regions (see Table 2.1). In comparison to other regions, African countries\(^10\) collect less revenue, 0.67 USD per hectare. Other developing regions, such as Asia and South America, collect significantly higher revenue than Africa, on average USD 5 each per hectare. Further, during 2000-2005, Africa was the only region that showed decreases in forest revenues, while other regions showed increases. Also, just three countries accounted for the majority of the revenue collection in Africa. This implies that although there are many forest-rich countries, the majority collects very limited revenue from the resource.

Table 2.1 Revenue collection and expenditure by region (2005)

<table>
<thead>
<tr>
<th>Region</th>
<th>Revenue (USD/ha)</th>
<th>Revenue (USD/m³)</th>
<th>Expenditure (USD/ha)</th>
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<tbody>
<tr>
<td>Africa</td>
<td>1</td>
<td>1.24</td>
<td>2.04</td>
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<td>Asia</td>
<td>5</td>
<td>4.31</td>
<td>22.46</td>
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<td>Europe</td>
<td>6</td>
<td>13.39</td>
<td>5.45 (30.95*)</td>
</tr>
<tr>
<td>North and Central America</td>
<td>4</td>
<td>3.40</td>
<td>16.28</td>
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<td>Oceania</td>
<td>4</td>
<td>5.33</td>
<td>0.51**</td>
</tr>
<tr>
<td>South America</td>
<td>5</td>
<td>10.80</td>
<td>0.26**</td>
</tr>
</tbody>
</table>

Source: FRA 2010 main report

\(*\) excluding the Russian Federation

\(**\) Large forest areas in PNG and Brazil lower the estimates for Oceania and South America

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\(^7\) The main source is FRA 2010 data which includes estimates of forest revenue and public expenditure. The FRA data provides partial estimates such as “Over 100 countries supplied this information, with countries reporting revenue collection accounting for 79 percent of the global forest area and those reporting expenditure accounting for 64 percent of the area.”

\(^8\) FRA 2010 data includes “all taxes, fees, charges and royalties collected specifically from the domestic production and trade of forest products, but it excludes general taxes collected from all sectors of the economy (e.g. corporation tax and sales tax).”

\(^9\) FRA (2010) includes “expenditure on forestry activities by all relevant public institutions”. This figure includes funding originating from domestic and foreign sources when not otherwise stated.

\(^{10}\) Data from 31 countries is included in FRA 2010.
Similarly to the rates of revenue collection, public expenditure on forestry has been low in Africa, approximately USD 2 per hectare. If expenditure is considered to be targeted only to public forests, the figures increased significantly for some regions. However, for Africa the expenditure per hectare increased only 11 cents. According to FAO (2008), this is because most forests in Africa, 95 per cent, are publicly owned. The FAO (2003) study revealed that the majority of the expenditure, 89 per cent, went into financing operating costs, of which staff cost was the largest component.

At the global level, most of the expenditure came from domestic sources. However, in Africa, the proportion of foreign sources was significantly higher, on average 28 per cent of the total expenditure. Considering only domestic public funding spent on forests, Algeria, Morocco, South Africa, Tunisia, Senegal and Tanzania spent the most out of the countries that were reported on in FRA 2010. The expenditure can be assumed to have risen since it was on average 0.67 USD/ha in 1999 (FAO 2003) in comparison to USD 2/ha in 2005. However, according to FAO (2003), in various countries across Africa, expenditure on forests was less than one per cent of total government expenditure.

It is useful to compare forest revenue and expenditure in order to observe whether the forest sector is a net recipient or net source of public sector financing. In African countries (as is also the case globally), governments spend more on forests than they receive in revenue from the resource. African countries on average spend double as much on forests as they collect revenue from the resource.

When comparing public revenue collection and expenditure of the countries that had data available, two countries in Africa made a net revenue: Gabon and Equatorial Guinea (see Appendix 1). Most countries made a net expenditure. The largest net expenditure took place in the North African countries of Morocco and Algeria, and both countries had a minor share of expenditure from a foreign origin.

According to FAO (2003), there was generally little correlation in 1999 data between total public expenditure and share of foreign public funding. Most African countries included in study also showed an increase in expenditures. However, the increases in most cases had failed to rise alongside inflation, so in real terms the expenditures had fallen in most countries.

According to an analysis of 17 African countries by Ajewole (2002), revenue generation had a positive correlation with expenditure, and 53 per cent of marginal revenue would return as expenditure in the sector. Also, GDP and population had a positive correlation, but with lesser magnitude. The study concludes that “if domestic expenditure for forestry development in Africa is small, as is being generally believed, then the low forest revenue generation is largely responsible”. In the light of this, the low public sector expenditure on forests in Africa is likely linked with the low revenue generation from the resource.

All domestic revenue generation is not necessarily visible in the government budget data, because some revenues can be directed to forest funds or are retained by the implementing agency. Well planned and monitored revenue retention can incentivize forest sector institutions to efficiently generate revenue and can enable timely investments in the forest resource and in the financing of institutional activities. See Appendix 1 for information on forest funds and semi-autonomous institutions.

### 2.2 Foreign public financing: Official development assistance

**Forestry official development assistance**

Foreign contributions have been an important source of financing of forests and trees in African countries. The forestry ODA disbursements have been on an increasing trend during
the past decade, growing steadily from USD 372 million in 2002 to USD 660 million in 2009, and then rapidly spiking to 1.2 billion in 2010. The share of the global forest sector ODA from the total global ODA was on an increasing trend between 2006 and 2010. As more funds were directed to forestry, the share increased significantly, becoming 0.8 per cent in 2010 (see Appendix 2). The spike in forestry ODA and the generally increasing trend are likely linked to REDD+ financing, which also spiked in 2010.\(^{11}\)

In 2010, as well as during the past decade, Asia was the most significant forest sector ODA recipient region; see Figure 2.1. Until 2010, Africa was second behind Asia in receiving forest sector ODA contributions, followed by Latin America. However, from 2009 to 2010, Latin America\(^{12}\) experienced almost five-fold growth and surpassed Africa. During the past decade, the trend of the disbursements has been a clear increase for Asia, while disbursement trends of Latin America and Africa had been relatively stable until the spike in 2010. From 2009 to 2010, all three major recipient regions experienced a significant increase in forest sector ODA. Africa has likely lost ground to Asia and Latin America due to the higher allocation of REDD+ related financing to other regions, because both Asia and Latin America receive a higher level of REDD+ financing than does Africa.\(^{13}\)

**Figure 2.1 Trend of the forest sector official development assistance by region in 2010**

During 2002-2010, most African countries received forestry ODA disbursements. However, the support centered only on one quarter of the African countries that received almost three quarters of all forest ODA; see Figure 2.2. The Largest recipients were Ghana, DRC and the Central African Republic. SIDS were poorly represented, as none of the 13 top receiving countries were SIDS. However, two of the top receiving countries were LFCCs (Kenya and Tunisia).

When one compares forestry ODA received between different geographical regions between 2002-2010, the Central African countries have received higher support than other regions. The Southern and Northern African countries have received the smallest amounts. This pattern

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\(^{11}\) For distribution of REDD+ financing over time, see [http://www.reddplusdatabase.org/#graphs_and_stats](http://www.reddplusdatabase.org/#graphs_and_stats)

\(^{12}\) Includes Developing Americas and the Caribbean

\(^{13}\) For the regional distribution, see [http://www.reddplusdatabase.org/#graphs_and_stats](http://www.reddplusdatabase.org/#graphs_and_stats)
likely follows the extent of the forest resources, with the Congo Basin forest region attracting support to Central African countries.

**Figure 2.2  Most significant official development assistance recipients (2002-2010)**

![Pie chart showing the distribution of official development assistance recipients](image)

Source: CRS

More details on forestry ODA in Africa and on financing related to the Rio Conventions and the processes supporting REDD+ and Forest Law Enforcement Governance and Trade (FLEGT) may be found in Appendix 2.

**REDD+ related support**

The International community continues to support African countries in preparing for nationally appropriate REDD+ regimes. According to Peters-Stanley et al. (2012), much of the financing and technical support has been directed to national REDD+ “readiness” efforts rather than to piloting projects. However, though national-level capacity for REDD+ is important, project implementation is also needed to demonstrate that REDD+ can work.

The Voluntary REDD+ Database (VRD) aims to “improve transparency around REDD+, support efforts to identify and analyze gaps and overlaps in REDD+ financing, and help share experiences on REDD+”\(^{14}\). The database gathers information on REDD+ financing on donors and recipients on a continuously updated basis and therefore provides insight into REDD+ financing volumes.

In November 2012, VRD reported total financing of about USD 6 billion. Of this, approximately 1 billion was directed to African countries as country support, and at least 288 million as regional support. **Only five countries have attracted half of the REDD+ financing in Africa** (Figure 2.3). DRC is the largest recipient, with over a fifth of all contributions, Tanzania has received 10 per cent and Burkina Faso and Cameroon 8 per cent each.

\(^{14}\) http://reddplusdatabase.org/about. Database lists funding generally since 2006 but some donors have started reporting later.
2.3 Innovative financing

Role of Africa in the forest carbon markets

According to Hamilton et al. (2010), forestry transactions were the first-ever carbon offsets starting the global carbon offset market in the early 1990s. Currently, the majority of the globally traded forest carbon offsets are from afforestation/reforestation (A/R) or REDD+ projects. In 2011, the value of the global forest carbon markets was USD 237 million, of which USD 185 million was for voluntary markets and 52 million for compliance markets. Although REDD+ has received a great deal of attention, the transacted volume of emissions reduction from REDD+ peaked in 2010, and in 2011, the highest transacted MTCO2e volumes were from A/R projects (see Appendix 3: Forest Carbon).

In Africa, the transacted MMTCO2e volume grew rapidly from 1.9 in 2010 to 4.7 in 2011, with expansion mainly coming from A/R projects, see Figure 2.4. This growth was the most rapid among all regions, demonstrating that Africa is beginning to grasp the opportunity to join regions such as Latin America and Asia in transacted MMTCO2e volume. The growth in Africa in 2011 brought in USD 24 million in project investments and offset purchases. The majority (97 per cent) of credits generated in Africa were sold on voluntary markets to buyers in the European Union.

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15 Chapter is in most parts based on Peters-Stanley et al. 2012
The majority of volume was generated by Kenya and Uganda, the latter also being the world’s fourth largest offset supplier country in 2011. Kenya and Uganda host approximately half of all Africa-based projects, and new project development and investments continue to expand in these countries.

Forest carbon projects in Africa

The CDM system was established under the Kyoto Protocol, and it allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each of which is equivalent to one tonne of CO2. The only forest-related project type allowed under the CDM is Afforestation/Reforestation, but these types of projects comprise less than one percent\(^\text{16}\) of all projects in the pipeline. **Africa hosts one third of all CDM A/R projects, which are located in only six countries;** see Table 2.2. An example of a registered CDM project in Ethiopia is given in Box 2.1. The investment environment specific to forest carbon projects is beyond the scope of this study, but the limited number of projects is likely because of the challenges in the operational environments and in the locating of suitable landscapes for establishing and implementing carbon sequestration projects.

\[^{16}\text{The share of these projects is 0.8 per cent, based on the number of all projects. Source: http://www.cdmpipeline.org/cdm-projects-type.htm. Accessed 11.11.2012.}\]
Table 2.2  Afforestation/Reforestation Clean Development Mechanism projects in the pipeline in African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Afforestation projects</th>
<th>Reforestation projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Senegal</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Uganda</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: UNEP Risoe CDM/JI Pipeline Analysis and Database, 1 November 2012

Box 2.1  Humbo Ethiopia Assisted Natural Regeneration Project

In the Humbo village in southwestern Ethiopia, rural communities are benefiting from an innovative carbon sequestration project that has successfully restored 2,728 hectares of biodiversity-rich land. The project received global attention in October 2012 when it was awarded Africa’s first temporary CERs for reforestation (73,000 credits) under the CDM. To fuel economic growth and fight poverty, the full amount of the carbon revenue awarded is being reinvested in productive, community-driven activities, paying for micro businesses such as beekeeping, livestock husbandry and the construction of a flour mill and grain storage facility. These activities are replacing traditional ones such as fuelwood collection, earlier the main source of income for many Humbo residents.

The credits generated by the project were purchased by the World Bank BioCarbon Fund, creating an important revenue stream for Humbo residents and setting an example for similar projects to be increased across the continent. “To fight climate change effectively, we need to reach out to the poorest communities in Africa and take the benefits of climate finance to them,” said Jamal Saghir, Director for Sustainable Development, Africa Region, World Bank. “The experience in Humbo shows how mitigation and adaptation activities can go hand-in-hand, empowering communities to save their local environments and restore degraded lands.”

The Humbo project is the first of its kind in Ethiopia using farmer-managed natural regeneration techniques to generate carbon credits. This allows rural communities to assist in re-sprouting of native species. In addition to limiting cattle grazing on forest land, which allows the Humbo mountain forest cover to regenerate, farmers are planting some supplemental tree species where needed. By restoring vegetation on the mountain, the fragile water catchment area is being protected, and the project is preventing water and soil erosion and flooding. In particular, sediment runoff currently threatening the fragile ecosystem of Lake Abaya - located 30 km downstream from the project site – is being reduced. This is helping maintain the supply of springs and subterranean streams that support the region’s water supply, and wildlife is also slowly coming back.

Ethiopia’s Ministry of Agriculture, World Vision and the World Bank are already discussing how to take the methods used in Humbo to other parts of the country. A/R CDM projects can only issue credits once per commitment period, and many are therefore waiting for the end of the Kyoto Protocol’s first commitment period to maximize the number of credits issued. While this is the first forestry project in Africa, and only the second world-wide to issue such credits, many others are currently undergoing verification.

Source: Summarized from a World Bank web-article

According to the REDD+ Database of the Institute for Global Environmental Strategies (IGES), at least four African countries have REDD+ projects. In 2011, Kenya was a pioneer in issuance: the first ever Verified Carbon Standard (VCS) REDD+ credits were issued in the Wildlife Works’ Kasigau Corridor REDD+ project (see Appendix 3). Furthermore, Kenya

18 Kenya, Mozambique, Uganda, the DRC in http://redd-database.iges.or.jp/redd/
received the first VCS credits issued to an AV/R project and implemented the first project to achieve verification of Climate, Community and Biodiversity (CCB) certified activities. The Kenyan projects were valued at USD 12.5 million in 2011, which was the highest amount in the region. Despite these successes, Kenya faces challenges, including those identified by the project developers as poor governance structures and lack of clarity in carbon ownership.

The risks that developers and investors encounter in Africa are similar to those in other developing regions. Developers consider the most common risks to be unclear or overlapping land tenure, civil unrest, shifting subsistence agriculture, population and economic growth pressures, legal and illegal extraction of forest resources, wood consumption for energy, charcoal production and consumption, lack of enforcement agency coordination and resources, absence of land management plans and other issues that vary by country (Peters-Stanley (2012)).

Payments for ecosystem services: water and biodiversity

In 2003, the Profor Forest Investment Forum concluded that “Markets for forest environmental services are underdeveloped”. An enabling environment must be developed to help accelerate private sector investment in environmental services such as carbon sequestration, biodiversity protection, and water services. Since the forum, much has happened in the markets for ecosystems services (ES) – especially regarding the forest carbon markets, which have received much global attention. However, there is much interest also in developing markets for other ES such as watershed services and biodiversity or to bundle these together with carbon. What might escape the public eye is that the water markets are, in terms of volume, larger than the forest carbon markets; the total transaction value for payment for watershed services (PWS) was USD 9.2 billion in 2008, and for forest carbon offsets, USD 237 million in 2011 (Stanton et al. 2010, Peter-Stanley et al. 2012).

Figures are not readily available on financing generated for forests and trees and linked to different thematic areas (climate, biodiversity, tourism levies and fees, and other charges applied to mining and hydropower and large infrastructure companies, etc.). Thematic area ODA flows can be identified, but beyond foreign public funding, a multitude of other financing sources exist, such as private ES schemes, innovative conservation schemes and payments generated through extractive projects such as mining.

According to Stanton et al. (2010), in 2008 there were 113 active PWS schemes globally. Latin America and Asia (including China) host the bulk of PWS schemes, while Africa had in total 20 programmes, of which 10 were active. In Africa, the volume generated in 2008 was worth approximately USD 63 million. PWS programmes can be implemented by various actors, such as the private sector, non-governmental organizations (NGO), community groups or a combination of actors. However, more than half of the schemes are implemented by Governments. See Appendix 3 for a description of two schemes in South Africa and Tanzania.

Regarding biodiversity markets, in 2010 there were 39 active compensatory mitigation programmes (Madsen et al. 2010). These varied from mitigation banking of biodiversity credits, to programmes channeling impact fees, to policies that drive one-off offsets. There were no active off-set programmes in Africa, but six were in development at the time of the study of Madsen et al. in 2010. There have been some cases of extractive industries, such as oil and mining companies voluntarily compensating for biodiversity impacts (e.g. in Ghana, Guinea, Madagascar and South Africa).

Beyond biodiversity offsetting, there are also other types of innovative schemes to protect biodiversity. The Zimbabwean CAMPFIRE programme has enabled participatory management and shared revenue generation for local communities. In essence, the communities manage
landscapes, produce ecosystem services and derive monetary income through sales of e.g. game hunting licenses; see Appendix 3.

**Debt-for-nature swaps**

Debt-for-nature swaps (DNSs) were introduced in the 1980s. The mechanism allows a country to convert its foreign debt into financing directed towards natural resource management and conservation. As described in AGF (2012), there are two main types of DNSs. In bilateral DNS, the creditor government will cancel or discount a portion of debt in exchange for the debtor country’s commitment to financing local conservation activities. In three-party DNS, commercial creditors sell the debt at a discount on the secondary market to third parties such as conservation NGOs. According to Sheikh (2010), the conservation funding created globally through DNS has already surpassed one billion USD. The peak for new DNS initiatives was in the early 1990s, after which the frequency has declined significantly.

According to Sheikh (2006), debt-for-nature swaps are generally viewed as a success by debtor governments and conservation organizations because of the funds generated for conservation efforts. Indeed, environmental benefits to the debtor country include for example promoting responsible resource use, helping to conserve biodiversity, maintaining ecosystem services and reducing deforestation. For example, in Gabon and Cameroon, DNS funds have been used to improve the management of parks and reserves. Furthermore, investment in conservation has the potential to boost economic returns through increased opportunities for tourism and improved water quality, even in the short term.

Approximately 13 per cent of the global DNS funding pool through 2010 has been directed to Africa, mainly by bilateral European creditor countries. In Africa, debtor countries include Egypt, Cameroon, Gabon, Madagascar, Tunisia, Tanzania and Guinea Bissau; see Table 2.3. In addition, the US has initiated a bilateral DNS with Botswana, and three-party DNSs have taken place in Madagascar and Ghana. Generated conservation funds generally range from approximately USD 100,000 to USD 50+ million.

Similarly to the global trend, the majority of the African DNSs were initiated in the 1990s, 1992-1995 being the peak years. Nevertheless, this translates into only 51 per cent of the generated conservation funds, thus illustrating that the fewer DNSs taking place after the year 2000 have been greater in volume.

An example of a DNS in Cameroon demonstrating how a DNS can direct significant funding volume to national-level forest and tree projects is found in Appendix 3.
Table 2.3 Conservation funds generated through bilateral debt-for-nature swaps in Africa

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>8.3</td>
<td>8.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Cameroon</td>
<td>25.0</td>
<td>25.0</td>
<td>14.8</td>
<td>14.8</td>
<td>14.8</td>
<td>98.4</td>
</tr>
<tr>
<td>Egypt</td>
<td>11.6</td>
<td>18.0</td>
<td>29.6</td>
<td>29.6</td>
<td>29.6</td>
<td>12.7</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Madagascar</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
<td>18.7</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1.1</td>
<td>0.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Grand Total</td>
<td>12.7</td>
<td>19.2</td>
<td>18.4</td>
<td>14.8</td>
<td>33.3</td>
<td>98.4</td>
</tr>
</tbody>
</table>

Source: Data compiled from Sheikh (2010).

For a brief account of Green Bonds, see Appendix 3.

2.4 Private sector financing

Private sector investment and financing originate from various sources, such as the broadly categorized ones that follow (also see Appendix 4):

- Forest sector value-adding industries
- Timberland Investment Management Organizations (TIMOs)
- Various types of funds
- Domestic investors
- Banks and other finance sector agents

In the context of investments in the forest sector, the main areas of interest in this study are i) plantation investments; ii) investments into natural forest management; iii) investments in value-adding forest industry; iv) potential investments in bio-prospecting; v) raw material sourcing; vi) processing linking forests resources to other sectors such as bioenergy, food production, the medical industry and the cosmetics industry, and vi) financing through banks and other finance sector agents. However, readily available data on forest-related investments in Africa are limited and exist only for commercial plantations\(^{19}\) and for foreign direct investment (FDI) in forest sector processing.

According to Indufor (2012b), Africa contains almost 5 million, a little over 9 per cent, of the 54.3 million ha of the world’s fast-growing forest plantations\(^{20}\) (see Appendix 4). However, the majority of these plantations in Africa are under public ownership, and private plantations cover only approximately 6 per cent or approximately 0.3 million ha of total commercial production plantations. The main species planted are pine and eucalyptus. A conservative cumulative estimate for investments\(^{21}\) into establishment of commercial plantations in Africa is circa USD 4 billion.

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\(^{19}\) Data on plantation areas are available in the Indufor Plantation Database.

\(^{20}\) Includes both publicly and privately owned intensively managed production plantations. Semi-natural planted forests, protective plantations and scattered woodlots are excluded.

\(^{21}\) The investment estimate is based on average cost during the first 3 years of the rotation, after which viable stock is assumed to have been established. Cost of land (e.g. to purchase or lease) is not considered.
According to PROFOR (2013), total annual private forest plantation investments in developing countries were estimated at USD 1,763 million\(^{22}\) in 2011. The estimated annual private investments in plantation forests in Africa were very small in comparison to the other regions, approximately USD 20 million or 1 per cent of the total value (see Figure 2.5).

Figure 2.5  Average private forest plantation investment in developing countries in 2011

One quarter of the cumulative investments in commercial plantation establishment in Africa have been made in South Africa. South Africa is the tenth largest plantation country in the world, with a plantation area of 1.3 million ha (Indufor 2012b), and it has actively facilitated investments with incentives schemes. Many North African countries account for a significant share of investments, as Algeria, Morocco and Tunisia account for a little under one fifth of the investments; see Figure 2.6. However, there are significant protective plantations established in these countries. Distinction between protective and productive plantations is challenging and, hence, some of the areas and related investments in these countries have likely targeted protective rather than productive plantations. Many of these investments, for instance in Tunisia, are financed from domestic expenditure (Daly-Hassen, 2012).

\(^{22}\) The figure excludes investments related to REDD, landscape restoration, and those from communities, households, and most of the SMEs.
Plantation investments in Africa are likely to increase in the future. According to Green Resources, the plantation establishment cost in East Africa is lower than in any other region\textsuperscript{23}, indicating potential interest on the side of investors. Also, the European Investment Bank (EIB) foresees the expansion of round wood production in Africa, with an estimated 25 per cent increase during 2005 - 2030\textsuperscript{24}.

The “greenfield” cross-border investments in forest products processing are notably limited in Africa, as they accumulated only around USD 4 billion between 2003-2012. Of the developing regions, Asia-Pacific has received the largest share of the greenfield investments in forest sector processing: over USD 40 billion over 2003-12 (see Figure 2.7). Also, Latin America has attracted significant investment at over USD 20 billion.

In general, investment in value-adding forest industries is limited, especially in Sub-Saharan Africa. The exception is South Africa, which is the economic powerhouse of the region. In Sub-Saharan Africa, only South Africa has a highly developed wood products industry. Good infrastructure, highly skilled human resources, high quality research and development capacity, a favorable policy and institutional environment, integration with processing and a strong linkage with global markets make South Africa competitive (FAO 2003).

\textsuperscript{23} Timber Invest Europe 2011 conference presentation (http://www.arena-international.com/Journals/2011/11/03/oi/j/Mads-Asprem.pdf)
\textsuperscript{24} EIB Timber Invest Europe 2011 conference presentation (http://www.arena-international.com/Journals/2011/11/02/n/e/u/Enrico-Canu.pdf)
When one compares private sector investment flows with forestry ODA, private sector investment flows are clearly larger than forestry ODA in all regions, even though only data for certain private sector investment flows are available (see Figure 2.8). **Only in Africa is forestry ODA a significant source of financing relative to the private sector investments.** A clear majority of the investment flows to establishment of plantations has been directed to Latin America, and the majority of processing-related greenfield investments has been directed to Asia-Pacific.
Domestic investment into small- and medium-scale plantations is increasing. For example, in Uganda, plantation investments grew four-fold from 2002 to 2008, and much of this has been accredited to domestic small-scale tree growers benefiting from the support of a specific public-private partnership (PPP) incentive scheme (Ruhombe, 2012). One method for assisting small-scale producers is outgrower schemes. An example of an outgrower scheme also involving PPP arrangements in Africa is described in Box 2.2.

**Box 2.2 Example of an outgrower scheme in Africa**

**Public-private partnership “Rubber Outgrower Scheme” in Ghana**

Under the Rubber Outgrower Scheme, KfW finances small farmers' rubber plantations. The scheme also includes support from German Financial Cooperation (FC) and AFD, the French development agency. The Ghanaian Ministry of Agriculture arranges a tripartite alliance between the agro-industrial partner GREL, the National Investment Bank (NIB) and the farmers. The NIB provides the farmers with loans refinanced by the German FC funds. The money is to be used to purchase and plant saplings. GREL supplies quality saplings and provides extension on how to farm and maintain the plantation properly. Access roads are also built where necessary. At the end of 2006, the framework agreements were signed with GREL and NIB. One thousand eight-hundred families cultivating a total area of 7,856 hectares have joined the programme. The NIB loans are financed over a term of 22 years, and GREL has committed to purchasing latex from the farmers. Prices will be in line with the world market and negotiated between the association and GREL. The Outgrower Scheme is bringing together agricultural production players, and the farmers familiarize themselves with modern farming methods and quality standards.

Modified from: http://www.kfwentwicklungsbank.de
In commercial natural forest management concessions, a significant portion of the investments is typically directed to activities such as road infrastructure, machinery and processing facilities, but the share of investments in SFM is unknown. One related challenge is the limited capacity of the Governments of developing countries to monitor and govern the natural forest concession. This can result in a loss of investment into SFM and therefore a loss of the related benefits that would have been generated.

Certification could be used as an indicator for sustainable management. According to Indufor 2012a, the certified area in Africa is approximately 3.5 million ha\textsuperscript{25}, so related investments into sustainable forest management could be significant. In the case of certified commercial natural forest management, investments are made in the context of productive, social and environmental aspects of the production activities. However, \textit{data on investment volumes into commercial natural forest management and the share of the investments allocated to sustainable management are currently not available}. Due to the limited information, the analysis is biased towards investments in processing and forest plantation development.

In some countries, investments into sourcing forest-based raw materials beyond timber can be notable. For example, in the Sahel region of Africa such products include cocoa, shea and gum Arabic. However, quantitative data on investments related to sourcing forest-based raw materials for the agricultural, cosmetics or pharmaceutical sectors are not available. Also, the tourism sector (based on wildlife) has the potential to bring significant investment into forestry, but the quantities of such investment in Africa are unknown.

\textsuperscript{25} This area likely includes both private sector concessions and government-managed production forests
3. DEMAND FOR FINANCING FORESTS AND SUSTAINABLE FOREST MANAGEMENT

According to AGF (2012), the lack of forest financing can be partially attributed to countries’ ability to quantify and articulate the full potential of forests and the flows between forest and other sectors. As observed in Ajewole (2002), there is a clear linkage between revenue generation capacity and public expenditure in the forest sector, i.e. higher revenue generation is linked to higher expenditure levels. Existing data show that from a public financing perspective, the forest sector creates a net expenditure. This might deter decision makers from increasing financing to the sector.

At the country level, clear documentation expressing the demand for forest financing in terms of volume and thematic areas is not common. The majority of African countries have a forest policy, national forest programme document or a similar document establishing the areas of thematic emphasis for the sector. Most of the countries also have a poverty reduction strategy (PRS) or similar development strategy. However, these are not commonly complemented with financing strategies. The study by AGF (2012) points out that “one fundamental weakness in poverty reduction strategy papers (PRSPs), national adaptation programmes of action (NAPAs), national forest programmes (nfps) and other reporting frameworks, is that they do not require any kind of focus on financing flows to forests.” In the absence of documentation on financing flows and modalities, political attention and the thematic emphasis can be observed through PRS in the form of macro-level documents, forest sector policies, NFP documents, and through strategies pertaining to climate and biodiversity.

Role of forests in poverty reduction strategies, country assistance strategies and climate strategies

The PRSP approach was initiated by the IMF and the World Bank in 1999. PRSPs guide a country’s overall development efforts and aim at poverty reduction. PRSPs describe the country's macroeconomic, structural and social policies and programmes over a certain time horizon (e.g. 3 to 5 years) to promote broad-based economic growth and reduce poverty; they also identify associated financing needs and major sources of financing. According to Simula (2008), many bilateral donors use the PRSPs in guiding country-assistance planning. The attention accorded and role given to forests and trees in national development strategies can be observed in the PRSPs.

According to Indufor findings (Indufor (2012a)), 35 African countries have developed PRSPs.26 Forests are taken into account to some degree27 in all of these strategies, and at least two thirds of African countries intend to invest in forest and trees as part of their strategy for development. In almost all of the PRSPs, the role of forests is defined in the context of biodiversity conservation, biomass energy provision, eco-tourism, restoration of degraded land, soil and watershed protection, employment and income generation, and agroforestry.

REDD+ is specifically promoted in the PRSPs of Ghana, Lesotho and Mozambique. LFCCs and semi-arid or arid countries such as Niger, Togo, Djibouti, Mali, Mauritania and Namibia mentioned the role of forests in combating desertification in their PRSPs. The multiple values and ecosystem services of forests are clearly recognized in the PRS documents. Forests are also viewed as important in other such sectors as energy, tourism, and social sectors. This indicates the countries’ demand for financing for increased ecosystem service provisions from forests and trees in a cross-sectoral context.

The envisioned role of forests and trees in the national development process can also be observed in the country assistance strategy (CAS). CAS is developed by the World Bank in

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26 Developing a PRSP is a pre-requisite made by the International Monetary Fund (IMF) and World Bank for a country being considered for debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative.

27 At the minimum, forests were mentioned even if their role was not elaborated on in greater detail.
consultation with the partner country to guide its assistance and to coordinate with other donors. CAS was developed for 40 countries in Africa, and in 37 strategies the role of forests was recognized. Most of these countries have significant forest resources either in terms of forest area or cover. The role of forests is specified in CASs mostly in the context of sustainable economic development, biodiversity conservation, poverty reduction, community forestry and sustainable management of natural resources. CASs of certain countries also specify forest governance in particular, and REDD+ and climate change mitigation in general.

The majority of countries with climate related strategies or NAPAs had noted the role of forests and trees in those. The most common contexts of incorporating forests in NAPAs were biodiversity conservation through reforestation, restoration, rehabilitation, and sustainable management of forests; poverty reduction and income generation through community-based management of forest resources; and participatory tree growing and reforestation. Some countries also highlighted the link to energy provision in terms of ensuring renewable energy through forest biomass. The role of forests in watershed management, carbon sequestration, drought control, and combating desertification through forestation were also highlighted. It is clear that forests have an important role in the climate strategies and that the importance of forest services are highlighted in a cross-sectoral context.

No matter the extent or forest resources, it seems that forests and trees and their multiple values are generally acknowledged in the development strategies of the African countries. For a detailed analysis of PRS, CAS and other relevant strategies, see the Background paper for forest financing in African countries (Indufor 2012a).

**Forest sector policies**

As discovered in the Indufor study (2012a), most African countries have national forest policies and/or a national forest programme. In the absence of country-level financing and investment strategies, it is assumed that the thematic areas emphasized in the policy documentation are also prioritized for financing. Thematically speaking, the key issues in the national forest policies of most countries are forest management, protection, afforestation, and reforestation. Common themes are also, in the order of appearance in programmes or strategies, i) participatory approaches, ii) capacity building, iii) information management, and iv) communication. Financing and investments are variably noted in the forest policies and NFPs. For example, in the forest policy of Kenya, the insufficient volume and potential future financing channels are briefly identified, and in the NFP of Uganda, forest financing is highlighted as one of the priority programmes (see the examples in Appendix 5).

Some countries have clearly identified financing and investment needs. However, when this documentation exists, it is not always aligned with national planning and budgeting processes. For example, as observed in Daly-Hassen (2012), the NFP of Tunisia contains an action plan and investment programme for short-, medium- and long-term financing needs (Appendix 5). However, because the NFP is not used as an official document, it is not used for planning and budgeting purposes. It is mainly used by the forest administration to guide their work and to give orientations to cooperation agencies. The official documents that are used as references by the forest sector decision makers are only the forest strategy and the forest development plan. These documents are not accompanied by a financing strategy for the forest sector.

According to Ruhombe (2012), in Uganda the government has created a sector-wide approach for the Environment and Natural Resources (ENR), known as the ENR Sector Working Group (ENR-SWG). ENR-SWG was established in 2001 and comprises wildlife, wetlands, land, forestry, environment, climate and fisheries sectors and has representation from public, private and donor entities. Its duty includes setting priorities, approving programmes or projects, monitoring resource allocation, and implementing ENR programmes. In the context of financing and investment, it establishes an ENR-Sector Investment Plan (SIP)
which lays out financing demands for each subsector, including forestry. It further mainstreams ENR-SIP into a PRS or National Development Plan (NDP). SIP budget proposals inform the allocations in the budgeting through the Medium-Term Expenditure Framework (MTEF). While SIP projections cannot override MTEF allocations, the Ministry of Finance will not accept proposals included in the SIP that have not been endorsed by the SWG. For forest-related financing needs the SIP establishes for 2008-2018 three thematic areas for financing: i) SFM, ii) wildlife and iii) ecosystems; it also outlines needed volumes of finance related to these thematic areas (for further information see Ruhombe, 2012).

It is clear that strategies for forest financing and investment are needed. However, when these are developed or exist, care should be taken that they align with the macro-level planning and budgeting processes and related documentation. Further, the strategies for financing and investment should be based on a sound analysis of the financing and investment demand, on the revenue generation potential and on wide stakeholder participation. According to FAO (2009), the development of national financing strategies embedded into national forest policies and programmes is highly necessary in order to diversify the financial basis of SFM, to guarantee SFM practices and to reduce deforestation and forest degradation.
4. **FINANCING GAPS AND CHALLENGES**

4.1 **Gaps**

There is no comparable comprehensive information available to establish the extent of the gaps in forest financing and investment. However, as observed in the case studies, the lack of sufficient financial resources hinders the ability of institutions to carry out their mandates effectively and to invest in SFM.

In light of the limited available data, it is clear that there is likely a significant gap in financing and investment in forests and trees in Africa. As demonstrated in this study, in comparison to other regions, Africa has thus far been able to attract a minor share of the known private sector investment flows, the REDD+ financing and the forestry ODA. Also, Africa’s share of forestry ODA has decreased over time. This decrease is likely related to the increased international financing for REDD+ and concentration of that financing in other regions. However, there are positive signals that the domestic small- and medium-scale private sector investments could be on the increase. This trend can be linked to strong domestic demand for wood and wood products in many African countries and possibly to increased attention in many countries to participatory forest management and forest tenure.

Financing flows in Africa, especially support allocated to REDD+ and the private sector investments, have centred on a limited number of countries, so the majority of African countries have not benefited from these flows. This likely implies that there are challenges in the investment environment and that there is a need for country-level attention to and investment in improving the operational environment. More information on REDD+ relevant financing demand and supply is in Appendix 5.

In the forest carbon markets, the African countries have in a mere couple of years reached the credit generation levels of Asia and Latin America. However, the forest carbon projects in Africa are centred on only a few countries. The question for the future is how more African countries could tap into opportunities in the forest carbon markets.

The Central African countries have received a higher forestry ODA flow than other regions, while the Southern and Northern African countries have received the least support. The pattern of the forestry ODA allocations is likely related to the extent of forest resource, which is why the Congo Basin forest region in Central Africa and the forest-rich regions in Eastern and Western African have received more support than the generally less forested Southern and Northern African countries. There is also strong regional cooperation in the Congo Basin related to COMIFAC and the Congo Basin Forest Fund that have been successful in mobilizing financing for the region; this can also increase the forestry ODA received by the Central African countries. The countries in Northern the Southern Africa are also mostly Low- or Upper-Middle Income Countries, while the majority of countries in Central, Western, and Eastern Africa are often defined as Least Developed Countries (LDCs) by the OECD. It would be natural to assume that donors would place special attention on the LDCs.

Regarding forestry ODA in African countries, according to the CRS, support directed to the thematic areas of “fuel wood and charcoal” and “education and training” has decreased significantly in 2010. Considering that forest and tree-based fuels are significant energy sources in many African countries and that their consumption is one of the drivers of deforestation and degradation, the trend can be considered worrying. Also, many countries have emphasized capacity building in their forest policies. In this regard, the decreasing contributions under education and training are problematic and are highlighted as gap areas. The reasons for these thematic trends are not clear. For example, REDD+ financing peaked the same year, but there are no data or studies available to show whether these are linked. Interviews of the development partners and the CRS to clarify whether these trends are linked
to donor preferences, to data classification, or to possibly other reasons would be required. However, these are outside the scope of this study.

With the devolution of resource tenure, the role of the communities and smallholders is becoming increasingly important. These stakeholders struggle to access financing, as formal financial institutions are geared towards serving large-scale clients. Payment for environmental services (PES) schemes have the potential to provide income for local populations and investment into SFM. There are increasing numbers of carbon projects in Africa, but a relatively limited number of projects on biodiversity and watershed services. The high upfront investment costs likely renders it difficult to tap into the full potential of these schemes. The lack of upfront financing for covering the establishment costs of PES schemes could be identified as a financing gap that potentially limits the number of PES schemes in Africa.

Data limitations confine the analysis of the financing and related gaps. According to PROFOR (2013), there especially are gaps concerning the level and scope of domestic investment, especially by smallholders, communities and SMEs, and investment in natural forest management. Important, there is also no readily available information on cross-sectoral financing flows, which can potentially be significant. For example, in Malawi one of the biggest tobacco companies in the country uses more than USD 4 million per year for forestry operations (PROFOR 2013). This is approximately four times the amount the Department of Forestry spends on plantation operations in the country, and is twice the total government budget for the entire forest sector. However, the magnitude of the cross-sectoral financing flows across African countries is currently largely unknown. The existence of data on certain financing flows and the lack of information of others can significantly affect understanding of the financing landscape and gaps thereof.

4.2 Challenges

Various financing-related challenges have emerged from the case studies and other material available. The challenges relate in general to institutional issues, governance, revenue generation and access to financing. In the case of investments, the challenge is related to the operational environment in terms of sector governance and incentive schemes.

Private sector access to financing

In a study by PROFOR (2013), nine leading banks and other financial institutions in Malawi were interviewed. All interviewed banks stated they do not consider financing forest plantations because of the mismatch between the long gestation period of forestry investments and short loan maturity period. None of the banks had financed investments in tree growing, but they did have experience in financing investment projects related to processing. In practice, financing has been available for mobile sawmill investments in harvest plantations, but not for plantation establishment. Thus, forest-related financing has been available mostly for short-term exploitation of forest resources, but not for sustainable plantation investments requiring a longer gestation period.

Banks also prefer to finance investments in large-scale processing targeted at export markets. For example, a 100,000 m³ capacity export market targeting sawmills could be financed through a loan denoted in USD, with 7-8 per cent annual interest. At the same time, a loan for plantation investment would be in local currency, with an annual interest rate of approximately 38-40 per cent.

According to PROFOR (2013), there are no development or investment banks in Malawi, and not enough accumulated capital in the private sector to invest in the forest sector, which is perceived as risky. The weak availability of domestic and foreign equity financing in general is
a challenge in Malawi especially because debt finance is often made available only after sufficient equity is in place.

**Cross-sectoral contributions and coordination**

Forests and trees generate crucial supporting goods and services for other sectors, such as the agriculture, energy, mining, and manufacturing sectors. However, often most of these values are not translated into monetary terms. For example, in Uganda, recent studies estimated the “total economic value” (TEV) (marketable and non-marketable values) of Uganda’s forests at USD 300 million, with a contribution to GDP closer to 6 per cent, which is much higher than the officially recognized figure (MWLE, 2001; Bush, et. al, 2004. in Ruhombe 2012). Hence, the total value of the forest sector’s contribution remains unknown. In the national accounting, goods and services generated by forests and trees can also be attributed to other sectors such as tourism, construction or manufacturing. For example, according to Daly-Hassen (2012), in Tunisia, forage for a livestock-based livelihood is a significant forest service. However, the created added value is not reported under the forest sector. Thus, the seemingly small contributions of the sector can result in lower allocation of public funds than would be optimal if one considers the supporting services generated for various sectors.

The global demand for forest and tree-based goods and services increases alongside the growth of the global population (Indufor 2012b). At the same time the competition for productive land increases; therefore, increasing the productivity per land unit while maintaining the ecosystems carrying capacity is crucial. To enable landscapes to be used for various functions, land use planning and management cross-sectorally is vital. Information on cross-sectoral coordination at country level is scarce. Based on the anecdotal evidence from the country case studies, this study found little evidence of robust cross-sectoral coordination that would also have an impact at field level. It is likely that in many countries the sectors continue to work in silos without effective institutional mechanisms for cross-sectoral coordination. It was also discovered that in cases where coordination mechanisms do exist, they might not be fully operational. However, synergies and opportunities are necessary to facilitate landscape-level land use planning and management institutional cooperation for analysis, acknowledgement and practical consideration of the cross-sectoral impacts.

**Lack of alignment of planning documents**

In some cases, the forest sector investment needs are established and quantified, but are not part of official planning processes. For example, the Tunisia NFP includes a forest investment programme, but as it is not an official document, it is not used as such in planning and budgeting processes (Daly-Hassen, 2012). The NFP and related documents are used to guide the work of the forest administration, but it is unclear how much they feed into the official documents, the forest strategy and the forest development plan, that are used as a reference by forest sector decision makers. In this case, to enable alignment, after the agreement of all the stakeholders, the NFP should become part of the official documents. This would allow inclusion of the investment plan in the planning and budgeting processes.

FAO (undated) notes that NFPs should be integrated into wider programmes for sustainable land use involving other sectors such as agriculture, energy and industrial development, but also that this is rarely done in practice. The FAO further observes that other sectors show only a limited willingness to participate actively in NFP processes and rarely fully consider the outcomes of such processes in their respective policies or planning processes.

**Non-monetized and informal contributions**

One challenge to financing is the non-monetary nature of forest sector activities and benefits. For example, in Tunisia, the added value of the forest sector is relatively small, and its
contribution to GDP is low (0.1 per cent). This situation is related to the non-monetary nature of most of the forest products and services. However, about 7 per cent of Tunisia’s population (nearly 760,000 people) lives within or in the vicinity of forest areas, and nearly one third of their income is obtained from commercializing forest products (FAO/DGF 2012a in Daly 2012). Forests in Tunisia offer a variety of non-wood products such as fodder, cork, edible food, medicinal and aromatic plants. In addition to livelihood, forests also provide significant watershed and biodiversity services and contribute significantly to satisfy the fuelwood needs of local populations (Daly-Hassen, Ben Mansoura, 2005 in Daly-Hassen 2012). However, in contrast with their environmental and socio-economic importance, many services and benefits are not monetized, which leads to seemingly low GDP contribution.

A similar issue is revealed in the Uganda case study. In Uganda, the forest sector’s contribution to the national economy in 2011 was estimated at 3.5 per cent (of which an estimated 2.1 per cent comprised informal and partially non-monetary contributions) (Ruhombe, 2012). Also, the estimates included only forest products and would be significantly higher if forest services were included. The low figures of the forest sector’s contribution to the national economy may decrease the interest of decision makers to invest public funding or to direct attention in improving the operational environment in the sector. Also, many forest sector activities take place informally. In Uganda, it was estimated in 2001 that the forest sector employs about one million people. However, it employs only 10 per cent in the formal sector and the vast majority, 90 per cent, in the informal sector (GoU in Ruhombe 2012). When the majority of activities are carried out informally, the government’s ability to collect revenue from the economic activities related to forests and trees is hindered.

Capturing revenue from forest ecosystem services

Income streams related to services generated by forests and trees do not always benefit the forest administration which bears the cost of managing the resource. For example, in Tanzania, there is no legislation requiring forest water users to pay for forest administration (Tanzania Forest Service) for management of forests to generate watershed services. However, the water authorities, who do not manage forest resources, collect water right fees from those who tap water from forest areas and receive water usage fees from irrigation schemes and power generating utilities. The lack of revenue hinders investment and management of the forests, and an optimal level of service provision is not attained.

Challenges facing small-scale wood enterprises and non-timber forest products-based enterprises

The ITTO held two forest investment forums, one in 2007 focusing on West and Central Africa, and the other in 2006 for Eastern and Southern African countries. Global significance of small-scale wood and NFTP enterprises were noted, and their role was expected to increase further. However, they face many challenges, most notable being i) insecure land tenure and access rights, ii) difficulties in accessing the market, iii) poor technical and weak business management skills, iv) high cost of capital, and v) poor infrastructure. Also, the high cost of SFM practices such as certification was seen as a barrier.

As noted in the Uganda study (Ruhombe 2012), the forestry sector is poorly served by the formal financing institutions, so accessing traditional sources (such as banks) for financing forestry business is still difficult. The financial institutions requirements set a threshold that most small- and medium-sized, and (often even) large-scale enterprises in the sector struggle to meet. Most financial service providers in Uganda lack experience in serving forestry and are hence unable to design appropriate financial products, just as many would-be clients lack the experience of working within strict contractual arrangements.

Furthermore, as noted by Akida (2012), small tree growers, who would otherwise potentially invest into woodlots, have limited knowledge of prices. Consequently, they collect only a minor
share of profits despite their long-term investment (15 years or more) into the resource. The lack of a control system enables many traders to purchase logs produced by small-scale growers at very low prices. This situation discourages smallholder investment.

**Adverse policies discourage private investment**

In Tunisia the profitability of forest plantations is low except for species producing fruits such as caper, carob and walnut, or eucalypt for honey production. To encourage investment in tree plantations on private land, Tunisia has established incentives, with premiums varying between 30 per cent and 50 per cent of the total cost, depending on the size of investment. Despite the incentives scheme, there is little private investment into planting trees. Due to the strict Forest Code requirements, landowners perceive that they lose control over the land. In addition, there have been conflicts between the landowners. These issues combined with the low profitability have led to low interest in tree plantation establishment, as landowners perceive the operational environment to be poor and profitability low.

**Suboptimal use of existing mechanisms**

According to Nguema (2007), the government of Gabon has set up public refinancing bodies which are designed to promote the financing of economic and social activities. Such institutions are i) the SME Development and Growth Fund, and ii) the Assistance and Guarantee Fund. In 2004, for example, the Development and Growth Fund financed only one project in the timber sector, with a mere 1 per cent of the value of its operations in 2004. It seems that the forest sector has not been successful in tapping into the opportunities set up by the government.

**Inflation degrading the forest revenue**

In a study by Ajewole (2002) based on 17 African countries, many did not revise their forest charges during the study period (generally 1990-2000). In the majority of those countries that made revisions, forest charges were still lagging behind inflation. Only three countries out of 17 had revised their charges in real terms. In practice, even though charges had been increased, their real value had decreased. In the rest of the countries, increases were modest in many cases. Even modest inflation can erode the real value of forest charges if they are not revised regularly. As concluded by Ajewole, evidence shows that inflation has not been considered in many countries when charges are revised. Further, low charges lead to under-pricing of the resource, as it makes the forest resources cheaper relative to other items in the economy. It can lead to inefficient use of the resources and low revenue generation, which can eventually lead to lower public financing of the resource.

**Low efficiency in revenue collection**

According to Akida et al. (2012), in Tanzania, only 5 - 10 per cent of the revenue due from the forest reserves and general lands is collected. The administration and management of revenue collection is weak and the revenue collection system is inefficient. Much revenue is either lost through illegal activities or uncollected due to staff shortage and inaccessibility.
5. ENABLING ENVIRONMENT FOR FOREST FINANCING AND INVESTMENTS

The enabling environment in the forest sector can be considered to encompass the institutional, political, legal, socio-economic and financial environments in a country. FAO (2009) defines the enabling environment to include specifically at least “factors concerned with governance and effective institutions within the individual country and the forest sector, such as the level of trust, transparency and accountability, the elimination of illegality and corruption, the existence of stable laws and policies, a well-defined land tenure system, and access to reliable information”. Stability, accountability and transparency of these factors in the enabling environment are essential to an enabling environment for forest sector business, investments and finance.

The investment climate can be considered to include the enabling environment and various other factors relating to direct physical conditions, infrastructure, availability of raw material etc. The World Bank has contributed to the effort to collect and make available better data on the investment climate through its Doing Business database, which includes the Ease of Doing Business (EDB) index. It rates countries yearly according to the ease of doing business, from 1 to 183, with first place being the best. A good ranking (i.e. a small number) in the EDB index (aggregated from various indicators) means that the regulatory environment is conducive to the operation of business.

Eleven countries28 in Africa had ratings over 170, reflecting that the operational environment of these countries is notably poor. In contrast, four countries had relatively positive ratings: Mauritius (23), South Africa (35), Rwanda (45), and Botswana (54); see Appendix 6. In the comparison of regions, Southern and Northern Africa had the best average ratings, 87 and 107 respectively. Eastern Africa and Western Africa had average ratings of 117 and 150, respectively. Central Africa had the poorest rating, on average 170. This means that regionally the enabling environment is most conducive for doing business in the south and north, but relatively poor in the east and west and very poor in Central Africa. Anecdotally, regarding investment in the forest sector, the ITTO forest investment forum of West and Central Africa (2007) noted that these sub-regions are known to be investment deficit areas. The causes are linked to perceptions that the investment environment offers less legal security in these two African sub-regions than in other regions. Also, political stability, governance, and inappropriate fiscal systems were highlighted by the forum.

The IWC Plantation Development Index assesses different variables that impact the decision-making of investors. These include e.g. the availability of land, general cost level, labour costs, road and railway infrastructure, inflation, sovereign debt ranking, importance of forest and government capacity. According to the IWC Index, the countries with the best ratings are in Eastern Africa. Of all the African countries, Tanzania, Mozambique, South Africa and Ghana have environments most conducive to plantation investments; see Appendix 6.

As observed in this study, the private sector investments in plantations and processing in Africa are significantly smaller than investments in other regions. Also, the total global FDI (of all sectors) is a fraction of the global total FDI flows, so low levels of investment are not specific to the forest sector but rather are related to the overall investment environment (Appendix 6).

Because SFM is a long-term activity with a long maturity period, both domestic investments and FDIs are sensitive to the investment climate and the related enabling environment of a country. From standpoint of the investor, the most common uncertainties for forest carbon projects (Peters-Stanley et al. 2012) and other private sector investments (PROFOR 2013) in Africa are as follows:

28 Angola, Benin, CAR, Chad, Congo, Zimbabwe, Eritrea, Djibouti, Guinea, Guinea Bissau, Niger.
i) Real and perceived risks related to unclear and/or unsecure land tenure, civil unrest, political instability, currency risk, social and environmental risks as well as reputational risks;

ii) Lack of land management plans, lack of information (on sites, climate, growth rates, suitable species etc.);

iii) Lack of coordination and resources of enforcement agencies; and

iv) Various direct and indirect drivers of deforestation and degradation. These drivers include e.g., population and economic growth pressure, shifting agriculture, both legal and illegal extraction of forest resources, consumption of wood as energy (both firewood and charcoal).

Main issues arising from country case studies

All the country studies included in this study highlight the importance of the enabling environment. For any financing or investment modality, the enabling environment is a decisive factor. The main issues highlighted were policy and legislation, institutional issues and governance, the socio-economic environment and domestic financing frameworks.

Policy and legal framework

Policy and legislation and the subsequent implementation and enforcement thereof are important factors in the enabling environment of the sector. The case studies highlighted the lack of implementation or alignment of existing policy frameworks and the lack of law enforcement as key issues of the enabling environment. As discovered in the background study, 41 of 54 African countries included in this study had a specific forest law. The remaining 13 may have legislation governing the forests but only under legislation of (an)other sector(s). Regarding policy framework, most African countries have national forest policies and/or National Forest Programs (NFP). Just four countries, all LFCCs, do not have either.

As highlighted in the Tunisia case study (Daly-Hassen (2012)), the lack of status of the NPF and related investment programmes as official documents hinders their alignment with the national planning and budgeting processes. As noted in the Uganda study (Ruhombe 2012), the country has elaborate planning and budgeting frameworks which are, however, not used properly. The actual implementation of these documents would undoubtedly improve the enabling environment for domestic expenditure. Many countries also face challenges in law enforcement. Some related underlying factors were identified to be limited resourcing, limited stakeholder awareness and governance-related challenges.

Institutional framework

As noted in the Indufor background study (2012a), forest administration exists in all 54 African countries included in this study. Although the institutional setting exists, various issues hinder the optimal functioning of the institutions. However, there are also various recent improvements, such as allowing more financial autonomy to institutions for revenue collection and retention.

As observed in the Tanzania case study (Akida et al. 2012), the recently established Tanzania Forest Service is allowed to retain most of the revenue collected, with the aim of speeding up the implementation of various programmes in the sector. Other changes in forest revenue strategy will also be introduced, including i) expansion of the revenue base, ii) improvement of revenue collection, and iii) improvement of the forest products pricing system. These aim to improve the financing of the sector and hence the ability of the institution to effectively carry out its mandate regarding SFM and governance of the resource.

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29 Indufor 2012a
The Tanzania case study also noted a lack of alignment of planning and monitoring procedures of country administrations and the donors, which leads to a high bureaucratic burden and to further delays in implementation and underutilization of resources. Improvement in this regard would benefit both donors and country stakeholders by improving communication and efficiency.

The Uganda case study highlighted overlapping mandates of various institutions governing forests and trees. The overlaps result in agencies competing for resources, time wasted on institutional conflicts, duplication of efforts and spreading too thinly of resources on the ground. This results in a poor operational environment that is unattractive to both donors and private sector investors.

According to the Tunisia case study, various crucial activities cannot be carried out by the forest administration due to the lack of resources (finance and personnel). Consequently, forest management plans cannot be established, or when they do exist, they are not applied. Forest revenues are also lost because the State forest company (REF) cannot harvest optimally, as the income it is allowed to retain does not meet its needs for financing operations.

**Financing and investments**

In terms of an enabling environment conducive to financing and investments, various issues were raised in the case studies. One issue common to all case study countries was that the formal contribution to the national economy is low when non-monetary and informal activities are excluded. Low contribution to and low public revenue generation from the forest sector hamper public financing to the sector and consequently can hinder forest institutions in proper governance of the resource. Low funding further reduces public investment into sustainable management of the forest resource, and also reduces the effectiveness of law enforcement in the monitoring of private sector operations. Further, poor sector governance is linked to a poor enabling environment and can negatively impact the private sector’s appetite for investment.

Especially in the context of private sector financing, the high cost of capital and difficult access hinder the private sector and may also negatively impact the adoption of sustainable practices and the integration of informal operators into the formal and monitored market.

In Tanzania, the forest policy promotes the establishment of clear equitable cost and benefiting sharing in the context of joint management responsibilities. Clear and equitable forest land and tree tenure rights will lead to higher incomes for the local communities and also to easier access of forests for subsistence use. Such arrangements are seen as facilitating improved sustainable forest management and investments into the resource.

Regarding public financing in Uganda, the budget allocated to the sector does not correspond to that indicated at the planning stage, leading to a discrepancy between the planning and actual budgeting. Political realities were identified as underlying reasons, because politicians want to show support to those sectors that gain votes. Also in Tunisia, funds are theoretically only granted for actions falling under the strategic priorities set in the national development plan. However, in practice there is a significant discrepancy between the distribution of approved funds required for the execution of strategic priorities and the real expenses incurred for developing the forestry sector.

**Socio-economic environment**

It has been widely acknowledged at the policy level of African countries that the local populations impact the forest resource and should be included in the sustainable management of forests and trees. Although the state still owns the majority of land in Africa, the devolution of land tenure is taking place in many countries. There is also an increasing trend in
collaborative and participatory management models whereby local populations increase their access to the forest resource and benefits. Although the potential for such arrangements has been noted, challenges remain.

As observed in the Tunisia case study, forests produce many crucial goods and services; however, local populations do not necessarily fully benefit from the resource and therefore might even view it as a hindrance to development. There is widespread unemployment and limited income opportunities in most forest areas of the country. This situation has created conflicts between the forest administration and the local population about the use of forest resources and the creation of employment opportunities. These conflicts further increased shortly after the political turmoil in early 2011 with increased fire frequency, physical violence against foresters, and trespassing against several national parks (in terms of illegal use of protected resources such as cutting trees for charcoal production). The study notes that alleviation of these conflicts could be achieved through participatory management and revenue sharing, allowing local population to sustainably derive benefits from the resource. The role of economic instruments, including PES, is noted as necessary and crucial for bridging the gaps existing between private and social benefits (Daly-Hassen et al., 2010).
6. INCREASING FINANCING FLOWS FOR SUSTAINABLE FOREST MANAGEMENT – STRATEGIES, LESSONS AND SUCCESS STORIES

As observed in the previous chapter, African countries face various gaps and challenges related to financing forests and investing in SFM. Existing enabling environments need to be improved to facilitate access to financing and the flow of investment. Existing mechanisms for revenue collection and for planning and budgeting need to be strengthened. Also, analytical and participatory processes are needed to establish the demand for financing and investment and to identify the related key barriers and strategies for overcoming them.

Total value of forest goods and services and the role of forests in decision-making

At the macro level, the key issue is the role of forests and trees and the corresponding political attention given to the resource. If the revenues and benefits from forest and trees are seemingly small in monetary terms and the cross-sectoral linkages and contributions are poorly articulated, it is challenging to convince decision makers to increase resources. To establish what the full contribution of the forests and trees is to the national economy, an analysis of the value of the formal and informal and both monetary and non-monetary goods and services needs to be conducted. In this analytical process, the cross-sectoral contributions are to also be established. Other sectors benefit from the forest ecosystem services, e.g. the tourism sector benefits from wildlife, manufacturing from water, hydropower from reduced sedimentation, etc. Once the true value of forests and trees is brought to light and communicated to the decision makers, political attention can be refocused and informed decisions on financing and investment can be made.

In Tunisia, an economic valuation of forest goods and services was performed in 2010 using the TEV concept (Daly-Hassen 2012). The valuation exercise aimed to express a wide array of forest and forest ecosystem goods and services in monetary terms. The exercise included wood products (timber, fuel wood), NWFPs, grazing, recreation, hunting, watershed protection (effect on reservoir sedimentation and crop production), biodiversity conservation and carbon sequestration. The resulting TEV was USD 123/ha and represented 20 times the value of net benefits generated by forest products sold by the State. The exercise resulted in a more comprehensive understanding of the value of multiple products and services generated by forests and trees, and will contribute to the strategy for development and sustainable management of forests and rangelands (2012-2021) and the related action plan.

Cross-sectoral coordination

There is still a tendency in the forest sector to work in “silos” without coordination with other sectors, clearly negatively impacting forest and trees. Coordination with other sectors during policy making and planning phases is needed and could be established through sector-wide approaches and sector working groups. This would also allow integrated approaches to natural resource management so that also the country-level activities on desertification, climate change mitigation and adaptation, and biodiversity conservation would be carried out in a coordinated manner. Such cross-sectoral coordination would allow for the maximizing of synergies and efficiency in resource use, including financing and investments. One already ongoing activity advancing integrated approaches is the UNCCD GM-facilitated Integrated Financing Strategies process. In the countries where such a process already exists, the forest sector stakeholders could take the opportunity to participate.

In Uganda, the Government has established the Environment and Natural Resources-Sector Working Group (ENR-SWG) in 2001 (Ruhombe 2012). The SWG comprises the wildlife, wetlands, land, forestry, environment, climate, and fisheries sectors and brings together public, private and donor entities. Its key duties include setting priorities, approving and implementing programmes and projects, monitoring resource allocation, developing ENR-Sector Investment Plans (SIP), and mainstreaming ENR-SIP into the National Development
Plan. The SIP budget proposals inform the budgeting process. SIP reflects the real needs of the sub-sectors since it is developed by the actual implementing stakeholders. The Finance Ministry will not accept proposals that have not been endorsed by the SWG and are not included in the SIP. The ENR-SWG is the main arena for cross-sectoral collaboration in Uganda. Its work process is managed through an institutionalized and time-bound dialogue, and it applies at both national and sub-national levels of governance and is administratively binding. Although there are challenges such as overlapping institutional mandates, it has facilitated a venue for cross-sectoral coordination and alignment for planning and budgeting processes. However, in practice the budgeting process is not fully followed as it should be and the actual allocations for forestry are low and do not reflect the priorities in the SIP. Readily available information on cross-sectoral coordination mechanisms is limited. A specialized study on a cross-sectoral coordination mechanism and financial flows relevant for forests and trees would be necessary to allow the gathering of a solid base of lessons and experiences of successful practices and challenges.

Regional partnerships

Africa has various regional networks and partnerships. An example is the Yaounde Summit and the Central African Forest Commission (COMIFAC). These are regional initiatives that have shown success in regional policy-level cooperation and in translating this cooperation into practice by increasing the area of protected forest ecosystems and mobilizing related financing. COMIFAC has its basis in the Yaounde Forest Summit held in Cameroon in 1999 and in the follow up meeting in 2005. Major outcomes of the Summit are the signature of an agreement of collaborative management of the 2.8 million hectare Sangha Tri-National (TNS) which includes parks and multiple-use zones in Cameroon, the Central African Republic and the Republic of the Congo. Also, the governments of Cameroon, Gabon and Congo have endorsed the Dja-Odzala-Minkebe (TRIDOM) trans-border conservation zone of about 14.6 million hectares, which represents 7.5 per cent of the Congo Basin rainforest and is already under protection nationally. The TRIDOM initiative has mobilized at least USD 10 million through UNDP-GEF. WWF considers the TNS and TRIDOM to be “pioneer conservation initiatives that have significantly contributed in forging a new vision within the Congo Basin on development and implementation of trans-boundary conservation programmes”. The Yaounde Declaration is also the framework for the Congo Basin Forest Partnership, which has mobilized significant financing to forest protection in the Congo Basin. The successful examples of regional cooperation to manage and protect the forest ecosystems could guide other regional alliances to enhance cooperation and generate related financing.

Establishing demand for financing and investments

Many African countries mention forests in their PRS and in other development strategies, and have established forest policies or NFPs. However, clear financing and investment demands are not well established. When demand is established, it also allows for other analytical processes such as those establishing financing and investment gaps. This can facilitate both the domestic decision makers and foreign donors in directing finance to gap areas and in better meeting the financing and investment needs. As noted by FAO (2009), national forest financing strategies (NFFS) can be established as part of an NFP. They are participatory processes establishing comprehensive national-level strategy for financing forests. The analysis of demand, available financing and related gaps can be undertaken in the context of the NFFS.

30 http://wwf.panda.org/what_we_do/where_we_work/congo_basin_forests/wwf_solutions/yaounde_summit/countries/
Revenue retention and decentralized organizations

The majority of African countries have a decentralized model for forest administration. Successful models have enhanced participation, increased the regional share of income from forests, resulted in better delivery of services and improved the sustainability of forests (Hitchcock, 2001 in FAO 2003). However, accompanying funding mechanisms have not always been put in place. Revenue retention has enabled better financing of semi-autonomous forest institutions and such schemes have potential also at the local level, when accompanied by necessary accountability and transparency. According to AGF (2012), the decentralization of forest funds or establishment of decentralized forest funds, especially at the local authority level and community level, has generated successful results in some countries. Revenue retention schemes have the potential to provide an incentive for the decentralized institutions to improve efficiency and access timely finance. However, an appropriate level of governance and monitoring must accompany the revenue retention schemes to allow for optimal outcomes.

Improved availability of information

Up-to-date information on forest resources is one of the key factors in decision-making and for efficient planning of activities and forecasting of revenues and expenditures. In Tanzania, the on-going National Forestry Resources Monitoring and Assessment (NAFORMA) project will provide sound baseline information for forest resource management and utilization planning. The data will provide information for resource utilization and improve revenue forecasts.

Currently, in many countries there are no easily available public statistics on government revenue from the forest sector. However, a mechanism allowing their public reporting already exists and is in use in many African countries. Under the Extractive Industries Transparency Initiative (EITI), the extractive industries (usually oil, gas and mining) report taxes, royalties and other transfers to the State. The initiative reconciles both reporting from companies and the Ministry of Finance. EITI assists in strengthening good governance and accountability, which in turn leads to an improved investment environment. Among the EITI countries, Liberia for example reports tax revenue from concessions in natural forests. In the fiscal year 2009-2010, the respective revenue was USD 12.2 million. EITI provides an opportunity for other countries to use the mechanism for transparent reporting to enhance the visibility and role of forests in the public agenda.

Forest charges and timber pricing

According to FAO (2003), low forest charges have a negative impact on total government revenue and expenditure. However, low taxes and charges can undervalue the resource and result in an unsustainable level of harvesting and unsustainable management leading to deforestation and forest degradation. According to a study of selected African countries by Ajewole (2002), since 1990, charges had increased by more than the rate of inflation in only a few of the countries studied. To resolve the impact of inflation on forest charges, the study proposed “automatic inflation adjustment procedures, written into legislation establishing or amending forest charges”. It further concluded that such adjustments should be based on readily available price indices, such as countries’ consumer price indices and GDP price deflators.
Competitive bidding procedures in the sale of timber can provide a direct, market-based measure for the pricing of the resource. For example, in Ghana, bidding is a detailed and transparent process. The bidding process starts with a public advertisement posted in national newspapers. Participants invited to bid are vetted in a pre-qualification process. The prospective bidder is given 6-8 weeks to undertake an independent inspection of the area intended to be bid on, in order to form an informed proposal. The bidding is carried out as a public event where individual bids are opened in public and assessed against a reserve price established by a specially hired professional, who shall not disclose the reserve price.

Forest funds and special accounts

Forest funds have the potential to facilitate forest sector financing by earmarking certain financing to the sector and also by allowing funds to be carried over a fiscal year, which can improve effectiveness of the use of funds. According to Akida et al. (2012), in Tanzania, the establishment of the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) and Tanzania Forest Fund (TFF) have increased the number of opportunities for funding forest protection and other core management activities. So far, TFF has financed 100 projects on conservation, livelihood and research projects with financing of about USD 1 million. EAMCEF has been successful in financing 90 community projects around the Eastern Arc Mountains. It has also extended support to district councils on tree planting and forest protection on LGA forest reserves. Nine nature reserves along the Eastern Arc Mountains also receive financial support from the Funds.

The Tanzania Forest Service (TFS) operates a special account, the Logging and Miscellaneous Deposit Account (LMDA), in state-owned forest plantations. Positive impacts have been realized with the introduction of LMDA on a pilot basis in 1989. It was established in three state-owned forest plantations and owing to its success, it was expanded to all forest plantations in 2000. LMDA allows state-owned forest plantations to charge and retain fees from logging activities, road maintenance and silvicultural activities and use the same fund for serving forest plantation budgets. LMDA can provide viable financing as long as there is sufficient allowable cut. LMDA has significantly improved planting of clear-felled areas, silvicultural operations and facilitation of the forest plantations administration. Currently, LMDA contributes to 100 per cent of forest plantation budgets.

Investment centres and facilitators supporting private sector investment

Various countries have established investment centres that provide key information on investment incentives and procedures and on the sector, and facilitate investment into the country, including in the forest sector. Such institutions enable potential investors to get information easily and facilitate entrance into the country. They function as “one-stop-shops”, where prospective investors can find information and carry out the formalities related to any phase of the investment process. An example of such an agency in Gabon is described in Appendix 7.

In Mozambique, the Malonda Foundation operates in the Niassa province. It is funded by the Governments of Mozambique and Sweden. The Foundation acts as a kind of intermediary and one-stop-shop facilitating partnerships and subsequent investment in the region. It assists in i) establishing key legal, business and information services; ii) fostering relationships between different decision makers to mobilize private investments; and iii) providing risk capital. The Foundation is initially working with ethical and profitable large companies, as it considers it imperative that in the development of small- and medium-scale forest enterprises, there is a need to create a critical mass for plantations and the necessary associated infrastructure (road, railways and other services). Subsequently, it will place special emphasis on working

31 http://www.malonda.co.mz/
with smallholders. The foundation has worked with Green Resources, which has signed a deal for 40,000 hectares, and has planted over 3,200 hectares from 2007 until March 2011\textsuperscript{32}.

**Incentive schemes and public-private partnerships**

Plantation investments are one key area of forest sector FDI in Africa. Investments into wood and bioenergy production have the potential to increase in African countries. The key plantation countries in the world have incentive schemes such as tax exemptions and direct or indirect plantation subsidies supporting the establishment of forest plantations. However, according to Indufor (2012b), there have been until now only few incentives for plantation development in Africa, with the exceptions of South Africa and recently Uganda. Typical plantation investment incentives used to support plantation investments and examples from Latin America are listed in Appendix 7.

In Uganda, an incentive scheme targeting smallholders has been successful in increasing domestic investment by small- and medium-scale investors. According to Ruhombe (2012), already in the late 1980s, the forest administration piloted a project in which individuals were given licences to establish wood-fuel forest plantations in peri-urban central forest reserves (CFR). They paid a small ground rent per unit area used, and the land remained the property of the Government, while the trees belonged to the licensee. The project was successful and was later extended to the production of sawlogs, given the imminent shortage of these in the country. In 2003, the EU and later Norway began to support the scheme (SPGS\textsuperscript{33}) by establishing a large up-front stimulus grant that refunds 50 per cent of tree farmers’ costs, provided certain technical standards are followed. The combined effect of the subsidy, technical support and availability of large pieces of land in CFRs at a nominal charge generated massive interest from the private sector. Today, there are several participating farmers who do not receive the subsidy and are using their own funds; others are using their own private land. SPGS has co-funded 16,000 ha since 2004 (24,000 ha planned by 2013). According to Ruhombe (2012), with an internal rate of return (IRR) of 7-10 per cent, which increases to between 10 and 14 per cent with an SPGS grant, forest plantation development in Uganda has become a prominent and growing destination for sector investment for the first time.

The SPGS has also supported the Uganda Timber Growers Association (UTGA), which was formed in 2006 by individuals and private firms with an interest in developing industrial plantations. The members of the association, led in large part by the private sector, were motivated by the opportunities to invest in fast-growing and high-yielding timber plantations to address the eminent shortage of timber in Uganda. Since its establishment, membership has grown to over 100, and the area planted has increased to 15,000 ha.

**Law enforcement**

Effective law enforcement can have a positive impact on revenue generation. According to Ruhombe (2012), during the period 2004 – 2008, effective law enforcement was restored in Uganda through establishment of the “Law Enforcement Unit” by NFA with a mandate inter alia to inspect, survey and stop trade in illegal timber nationwide. The unit maintained a database for licenses and legally and illegally acquired timber. As observed in the Uganda case study, both the state revenue and the revenue from impounded timber increased significantly during 2004-2006.

\textsuperscript{32} http://www.newforests.net/index.php/hmd_article/mozambique
\textsuperscript{33} For more information see e.g. www.sawlog.ug
Enabling environment for private sector investment

According to PROFOR 2013, countries cannot change certain conditions such as their location or growing conditions. However, there are opportunities to improve other elements of the investment environment to facilitate investment into forests and trees by various types of investors, whether domestic, foreign, large or small scale. The key enabling elements are related to governance, transparency, national policies, legislation, regulations, practices, information availability and infrastructure. The study identifies the following key factors for success in stimulating both domestic and private forestry investments: i) clear land tenure arrangements and ease of land acquisition; ii) strong demand for wood in domestic industries or in areas close by coupled with the size and growth potential of the domestic and export market; iii) an abundant and skilled workforce; iv) access to arable land and suitable growing conditions; v) lack of competition from other crops and land uses; vi) access to sea and available infrastructure; vii) local government willing to subsidize investments; and viii) a supportive overall investment environment, including political and economic stability, presence of “rule of law”, simple and fair taxation, security of land tenure, and minimum bureaucracy.
7. CONCLUSIONS

As observed by AGF (2012), the recognition of the critical importance of forests remains low amongst key financing and investment stakeholders, such as government officials and the finance and investment communities. Consequently, forests have not been prioritized by the decision makers. Levels of financing and investment are still too low, and financing mechanisms for sustainable forest management and conservation-related activities are limited. As observed in this study, many African countries make note of forests in their PRSs and other development strategies, and they have devised forest policies and relevant legislation. However, financing for forests remains low and, as discovered in the case studies, it does not follow the policies and plans that have been put in place. Low political priority, insufficient recognition of the full value of forests and trees, unawareness of cross-sectoral linkages, and low levels of capacity (especially at the decentralized level) are all challenges to mobilizing financing.

In tandem with the increasing climate financing related to forest carbon, a transformation is taking place in the international public sector forest financing arena. Currently, much of the financing allocated to forest development is channelled as ODA, but in the future, the volumes of these flows might be superseded by performance-based payments for forest carbon. The financing related to REDD+ and other forest carbon-related activities, as agreed under UNFCCC, is to be new and additional. The spike in 2010 forest ODA statistics is likely related to this, because some donors require carbon finance to also meet ODA requirements. Much of the REDD+ financing, especially in the readiness phase, concentrates on issues that are common to conventional forest ODA, such as support given to policy and legislative frameworks as well as capacity building.

Forest official development assistance is on the rise – but how much is Africa benefiting from it?
There have been significant changes in forest ODA in 2010; the volumes have increased in all major recipient regions. However, ODA directed to Latin America grew relatively faster than that directed to Africa, which signals changes in donor preferences. This can be linked to increased support for REDD+, indicating that both Asia and Latin America might have been faster in reacting to and attracting related support.

Forest ODA centred on a limited number of countries
A relatively limited number of countries receive much of the forestry ODA support, as only 13 countries accounted for approximately three quarters of all support. On average the Central African countries have received a higher proportion of forestry ODA. One reason could be the successful regional cooperation in the Congo Basin related to COMIFAC and the Congo Basin Forest Fund.

Forest carbon markets offer great potential – but not for all countries
Based on transacted volumes of mainly A/R and REDD+ credits, African countries have in a couple of years reached the levels of Asia and Latin America. The projects in Africa are, however, located in limited number of countries, which implies that the financing generated will only benefit those countries. For example, although African CDM A/R projects account for a third of the world’s total, they are located in only six African countries.

Financing made available for REDD+ has centred on relatively few countries - only four countries covered almost half of the funding for REDD+. The greatest potential for REDD+ lies in countries endowed with natural forests but facing deforestation and degradation. It can be concluded that the increased REDD+ financing will not likely be evenly distributed to all African countries. Also notable is that many of the countries benefiting from REDD+ support are also among the high recipients of forest ODA. The forest carbon market offers great potential for countries to increase financing for sustainable management, for protection and conservation of forests, and for related services such as watersheds and biodiversity.
However, it is unlikely that all African countries can tap into this potential. Also, the underlying challenges on tenure, carbon ownership and equitable benefit sharing with communities need to be resolved to pave the way for sustainable outcomes.

**Private sector investments can bring more than just money**

There is generally limited domestic public financing available to the forest sector and for SFM, leaving the forest sector almost entirely dependent on ODA and private sector investment. Rather than being a major source of financing, ODA should play only a catalytic role and leverage and boost the quality and quantity of domestically generated public and private sector finance for SFM.

In many countries, the main share of the domestic expenditure keeps the administration running; relatively little of the funds are available for training, education, research and development. ODA has the opportunity to remove this obstacle. Good capacity levels in the work force, public institutions and R&D contribute importantly to the enabling environment for private sector investment. However, in light of the low domestic resources and of the decreased share of ODA for research, education and training, a clear financing gap can be identified.

According to available data, private sector investments in plantations are on the increase in Africa, and hold a great deal of potential. If the operational environment is stable and an enabling one, it is assumed that other types of investments will increase as African countries integrate into the global economy. The trend of Chinese interest in Africa in the forest sector and others shows there is a trend for increasing investments. At best, private sector investment does not bring only money into a country; it also has the opportunity to bring technology, knowhow, investment into R&D, improved production techniques and enhanced productivity per land unit.

**Is the future of wood supply and poverty reduction in African vested in smallholders?**

Various countries in Africa, especially in the eastern and southern parts of the continent, have favourable conditions for fast-growing tree plantations. The domestic demand is increasing rapidly for building poles, construction grade timber, fuelwood, and fruit. Ownership and tenure structure of plantations has been and continues to be more diversified, giving a larger role in the future to private small- and medium-sized tree growers. These producers have untapped potential in supplying the market, especially if one of the key challenges, secure land tenure, is supported.

As seen in the case studies, the supply from the smallholder sector is on the increase. Their importance has for instance been highlighted at ITTO African forest investment forums. The forums have also concluded that Governments must support the trend towards community and private forest ownership and assist SMEs in creating associations and producer groups, to facilitate, among other things, absorption of technical assistance for training and improved public information flow. New innovations in technology, logistics and market access will be required to fully tap their potential and solve the related challenges.

As observed in this study, PPPs can provide a successful way to support small-scale producers in accessing finance and thus overcoming high upfront costs. These partnerships, including incentive schemes and risk mitigation (such as the SPGS), can help in closing the gap between financing demand and supply. Another method that can transfer upfront financing, technical capacity and high quality inputs are outgrower schemes that are facilitated by the private sector, creating win-win situations. However, care must be taken to ensure socially and financially equitable benefits for and partnerships between local communities and smallholders, large forest industry companies and the State. Also, the ICT sector can play a significant role in introducing new tools to facilitate financing to rural inhabitants, for example through mobile banking and other new solutions.
Domestic revenue
Fiscal structure and the level of charges need to be optimally set to allow for both revenue generation and sustainable management but to avoid wasteful use of the forest resource. As observed in a study by Ajewole (2002), revenue generation positively impacts domestic expenditure. Hence, both the correct level of revenue and efficient collection of it are crucial to also permit expenditure on the resource. As observed in this study, in many countries the level of revenue collected is a mere fraction of its potential. Countries face multiple challenges often only centred on the lack of resources and capacities. Domestic revenue is key to long-term financing for sustainable management of forest resources. Capacity building and other support for revenue generation are key areas in donor support. However, as was discovered, training was one of the areas that had very limited and decreasing support.

Payment for ecosystem services – a lot of talk, but no action?
PES schemes are often mentioned as a potential financing source for forest resources, and they hold the potential to provide local income and enhanced conservation outcomes. There are indeed some examples of PES schemes in Africa. While there are increasing numbers of projects on forest carbon, the numbers of other PES schemes have been modest. The high upfront costs are likely an obstacle. Although the mechanisms themselves can be self-financing and financially sustainable, the problem lies in finding financing to set up the mechanism. This can imply significant costs i) in capacity building related to policy, legislation, monitoring and accounting; and ii) in preparatory studies on potential, feasibility and correct set-up of the mechanism. To enable a wider application of PES schemes, the upfront costs need to be reduced, or external support needs to be found to cover them.

No amount of money will solve the challenges in the forest sector unless the issues in the enabling environment are solved.
Many challenges prevail in the enabling environment for financing and investment allocated to forests and trees. Firstly, hampering public sector interest in financing and investing into forest and trees are i) low levels of revenue collection with respect to the full forest revenue potential, and ii) the perception on the part of decision makers of the forest sector as a net expenditure. Secondly, the lacking, yet-to-be-determined figure on the total value of goods and services of forests and trees and their cross-sectoral contributions prevents decision makers from acknowledging the significance of forest contributions and from allocating finance and investment accordingly. These underlying key issues also impact the private sector investment environment through suboptimal incentive schemes, inadequate support for investment, and adverse policies discouraging investment. As noted in the cases studies, poor governance, weak institutions and lack of resources were often referred to as the key challenges in the enabling environment. Enhancing capacities at all levels is an important element in solving the multiple challenges in financing and investment in forests and trees in African countries.
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http://reddplusdatabase.org/

FAO FRA 2010:

Indufor Plantation Database
Appendix 1

Forest revenue and expenditure in African countries
<table>
<thead>
<tr>
<th>Country</th>
<th>Revenue ('000 USD) per ha</th>
<th>Domestic funds, ('000 USD)</th>
<th>External funds, ('000 USD)</th>
<th>Total expenditure ('000 USD) per ha</th>
<th>Net revenue or expenditure, ('000 USD)</th>
<th>Share of foreign funding from total expenditure, (%)</th>
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<td>102257</td>
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<td>Morocco</td>
<td>76838</td>
<td>15.12</td>
<td>171192</td>
<td>14255</td>
<td>185447</td>
<td>36.50</td>
</tr>
<tr>
<td>Mozambique</td>
<td>6489</td>
<td>0.16</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Namibia</td>
<td>88</td>
<td>0.01</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Country</td>
<td>Revenue</td>
<td>Expenditure</td>
<td>Net revenue or expenditure, ('000)</td>
<td>Share of foreign funding from total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------</td>
<td>-------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niger</td>
<td>1739</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>0</td>
<td>4</td>
<td>na</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>359</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senegal</td>
<td>3157</td>
<td>18848</td>
<td>51404</td>
<td>-48247</td>
<td>63.3%</td>
<td></td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>648</td>
<td>623</td>
<td>1090</td>
<td>467</td>
<td>-442</td>
<td>42.8%</td>
</tr>
<tr>
<td>South Africa</td>
<td>7349</td>
<td>66189</td>
<td>66189</td>
<td>66189</td>
<td>-58840</td>
<td>na</td>
</tr>
<tr>
<td>Swaziland</td>
<td>0</td>
<td>388</td>
<td>663</td>
<td>275</td>
<td>-663</td>
<td>41.5%</td>
</tr>
<tr>
<td>United Rep. of Tanzania</td>
<td>11637</td>
<td>18004</td>
<td>50778</td>
<td>32774</td>
<td>-39141</td>
<td>64.5%</td>
</tr>
<tr>
<td>Togo</td>
<td>140</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Tunisia</td>
<td>11260</td>
<td>26976</td>
<td>32371</td>
<td>5395</td>
<td>-21111</td>
<td>16.7%</td>
</tr>
<tr>
<td>Zambia</td>
<td>1038</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>

Source: FAO 2010
Semi-autonomous institutions

Some countries have institutions in the forest sector that are autonomous to some degree. These are required to generate part or all of their financing and they may retain all or part of the revenues generated. They can also in some cases get some support from the government budget. Semi-autonomous institutions in Tunisia and Tanzania are described in the box below.

Examples of semi-autonomous institutions

<table>
<thead>
<tr>
<th>Régie d’Exploitation Forestière in Tunisia</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to Daly-Hassen (2012), Régie d’Exploitation Forestière (REF) is a state-owned autonomous commercial enterprise for forest exploitation. It is in charge of forest product harvesting from state forests and of commercialization. Forest products are sold by REF through auctions, mutual agreement, local sales based on official tariffs and invoicing. Forest revenues are generated from these four sales modalities and are funneled either to the state budget account or retained by REF.</td>
</tr>
<tr>
<td>The State total gross revenue generated by forest products was USD 9.034 million in 2010, distributed as follows: auctions (77.3 per cent), mutual agreement (13.9 per cent), local sales (8.3 per cent) and invoicing (0.5 per cent). The part of revenue retained by REF varies generally between 8 and 14 per cent of the total revenue, and the remaining share is directed to the state budget account.</td>
</tr>
<tr>
<td>The aim is for REF to be completely self-financed. However, the enterprise’s share of the revenue is usually not sufficient to cover the costs of harvesting operations. It covered 71 per cent of the harvesting cost of REF in 2008, and only 33 per cent in 2011. Hence, it is compelled to seek other funds from the Ministry of Agriculture and from different regional and national programs to ensure the execution of its activities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tanzania Forest Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to Akida et al. (2012), the Tanzania Forest Service (TFS) was launched in July 2011 as a semi-autonomous government Executive Agency. The establishment of TFS was part of the on-going Public Sector Service Reform Programme (PSRP). TFS has been mandated with managing national forest reserves (natural forests and plantations), bee reserves, and forest and bee resources on general lands.</td>
</tr>
<tr>
<td>The establishment of the TFS as an Executive Agency will enhance the management and conservation of forest and bee resources for a sustainable supply of quality forest and bee products and services. Responsibilities for development of forest policy, laws and regulations and overseeing of the implementation of these will remain with the Forest and Beekeeping Division (FBD) of the ministry.</td>
</tr>
<tr>
<td>TFS started its operations (field and administrative) in the financial year 2010/11 as a transitional period ending in the financial year 2012/2013. TFS can retain part of its revenue to fund its activities; in addition, all state-owned forest plantations are allowed to charge and retain logging, silvicultural and road fees from customers who are licensed to harvest. In this regard, TFS is expected to be 100 per cent self-financing, but any amount collected in excess of the annual budget is sent to the Treasury. However, until TFS can cover all its operational and staff costs, the Government (through the Ministry of Natural Resources and Tourism) will continue to pay for staff salaries.</td>
</tr>
</tbody>
</table>

Forest funds

Forest funds are set up to deliver a portion of national revenue to bodies representing a variety of forest-related purposes. According to Ajewole (2002), the uses of funds may include the management of public lands, market promotion, research, education, insect and disease control, reforestation and afforestation, community forestry projects, or promotion of the production of environmental services. There are various types of funds, and no single standard exists for them. According to Rosenbaum and Lindsay (2001), the structural set-up of the forest funds vary from funds having an independent institutional structure to funds that are
set up directly under forestry or finance ministries and included in their accounts but without a special institutional structure.

A forest fund may also be included in the budget or be an extra-budgetary fund. In the latter case, they allow investments to be independent from the budgeting cycle. Funds may obtain income from single or various sources. Such sources could be a Government’s forest revenue or general revenue, a percentage of royalty from natural resource use, forest taxes, and/or donations. For a discussion on positive and negative aspects related to forest funds, see Rosenbaum and Lindsay (2001).

**National and regional funds**

A forest fund at the national level is typically established by legislation defining the fund’s governance and administration structures. Forest funds are generally established to facilitate financing for forests. According to a study by Ajewole (2002), existence of a forest fund increases domestic expenditures only little. However, it was noted that the funds can significantly help in mobilizing financing from various sources.

Over half of the African countries (30 out of 54) have funds relevant to forests and trees. These funds have a variety of objectives. Most aim to restore and/or enhance the forest cover, while some provide funds for basic service provision related to forests and trees (e.g. in Kenya and Lesotho). Many aim to support local participation (e.g. Tunisia), biodiversity conservation (e.g. Kenya, Mozambique and Madagascar) or plantation development (e.g. Ghana). List and description of funds are in the table below.

Many forest funds also have clear cross-sectoral linkages in supporting the forest resource so that other sectors can derive benefits. The funds in Tunisia encourage wood and forage production, which highlights the importance of forests and trees in cattle and energy production. South Africa has a fund that recognizes the recreational and spiritual values of forests. In Mozambique, forest funds support wildlife protection; in the Central African Republic, they support tourism.

In the future, more national-level funds can potentially be established or existing funds restructured to channel REDD+ payments. For example, the Readiness Preparation Proposal (R-PP) of Burkina Faso (2012) notes a potential fund would invest in projects that contribute to emissions reduction nationally. It foresees that the fund would cover the cost for the implementation of the national REDD+ strategy by converting one of the existing two funds or by creating a new fund. In some countries, funds have also been created at the local level, such as district forest funds in Cameroon, to support decentralization processes.

Regional forest-relevant funds are established to aid activities that can be implemented in multiple countries. Regional funds are usually administered by an organization, such as the African Development Bank (AfDB), which manages the Congo Basin Forest Fund.
### National forest funds

#### Forest funds in African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Fund</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Fondation des Savanes Ouest Africaines (FSOA)</td>
<td>An umbrella fund sourced by WB (GEF) and the Government through the CENAGREF. The focus is on conservation units and the environment, more specifically the savanna.</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Fond forestier (FF), Fond d'Aménagement Forestiere (FAF)</td>
<td>The legal basis for the establishment of the FF was the National Forest Code (1997 and 2011).</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Fonds Spécial de Développement Forestier (FSDF)</td>
<td>Cameroon established its Fonds Spécial de Développement Forestier in 1994. It is intended to finance forest management activities carried out on behalf of the relevant ministry. According to the law, the fund's income is largely derived from various taxes, fees and receipts of sales, which are to be shared between the fund and the public treasury as specified by decree.</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>Fundo Florestal Permanente (FFP)</td>
<td>The permanent forest fund is a fund jointly created by the governments of Cape Verde and Portugal to promote sustainable forest management and conservation. The main financing sources are taxes and fees.</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>Fund for Forest and Tourism Development (FFTD)</td>
<td>The FDFT was dissolved by the Finance Act in January 1999 and renewed after a year as the Special Allocation Account - Forest Development and Tourism (CAS - DFT). The Finance Act 2000, which created the Special Allocation Account, states that operations on these accounts are planned, authorized and executed under the same conditions as the operations of the general budget. Main sources of financing are i) taxes and fees on forestry, hunting and tourism; ii) grants, gifts and bequests; iii) loans; iv) the sales proceeds; and v) income for services rendered. Allowable expenses on this account are i) the performance of work contracts by the administration or enterprises; ii) operating costs, fuel, equipment and supplies from the Special Account; iii) national contributions to international organizations in forestry and tourism; and iv) national counterpart financing for projects.</td>
</tr>
<tr>
<td>Chad</td>
<td>Fonds Spécial en Faveur de l'Environnement (FSFE)</td>
<td>The environmental law of 1998 established a special environmental fund. The fund aims to contribute to the protection and enhancement of the environment. To this end, the fund contributes to i) promoting and participating in any action, research, study and training applied to the environment; ii) funding incentives provided under the Act; and iii) funding pilot operations.</td>
</tr>
<tr>
<td>Congo</td>
<td>Fonds d'aménagement et des ressources naturelles</td>
<td>Receives income from various sources and finances activities in forestry, wildlife and aquaculture.</td>
</tr>
<tr>
<td>Forest Fund (FF)</td>
<td></td>
<td>The fund was created in 2000 together with the establishment of the Forest Act. The Fund is managed by the Ministry of Rural Economy who can delegate authority to the Director of Forestry. A budget is prepared by the Director and submitted annually to the Ministry of Rural Economy and the Ministry of Finance. Receipts include: management taxes created by the 1974 law.</td>
</tr>
<tr>
<td>Country</td>
<td>Fund</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DRC</td>
<td>National Forest Fund (NFF)</td>
<td>This fund was created in 2002 with the Forest Code and further developed by a decree in 2009.</td>
</tr>
<tr>
<td>Ghana</td>
<td>Forest Plantation Fund (FPF)</td>
<td>The fund was created in 2000 by the Forest Plantation Fund Act. This Act establishes the Forest Plantation Development Fund and the Forest Plantation Development Fund Management Board, provides for management and other matters regarding the Fund, defines the functions of the Board and provides for the appointment of Forest Plantation Inspectors. The objects of the fund are to provide financial assistance for: (i) the development of private forest plantations on lands suitable for commercial timber production; and (ii) research and technical advice to persons involved in commercial plantation forestry on specified conditions. The Fund shall be managed by the Forest Plantation Development Fund Management Board, which shall adopt a private sector forest plantation development scheme and promote investment in commercial forest plantation development through incentives and other benefits.</td>
</tr>
<tr>
<td>Gambia</td>
<td>National Forestry Fund</td>
<td>Established in 1996. Receives income from various sources and finances protection, development, and sustainable use of forests and promotion of community forestry.</td>
</tr>
<tr>
<td>Guinea</td>
<td>Fonds Forestier</td>
<td>This fund is for forest development with multiple forest-related income sources.</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>Forestry Fund (FF)</td>
<td>A special fund for forestry sector management was created by the Forest Act of 1991. The fund focuses on providing resources to the following: - planting and replanting of tree species - creation of state nurseries - dissemination of knowledge to the community - R&amp;D - loans for forest sector activities - training and formation of forest agents - refund of loans given to the fund - government spending on forest-related activities - forest-fire control and prevention - promotion of agroforestry Sources of funding: Fees, taxes, donations and loans</td>
</tr>
<tr>
<td>Country</td>
<td>Fund Description</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Kenya</td>
<td>Forest Management and Conservation Fund (FMCF)</td>
<td>The Kenya Forest Service, under Section 18 of Forest Act 2005, is currently in the process of setting up a fund called the FMCF. The key purpose of the Fund will be to promote the development, maintenance and conservation of forests, promotion of commercial forest plantations, provision of forest extension services, promotion of community based forest projects, facilitation of education and research activities, and establishment of arboreta and botanical gardens. The Fund is expected to be financed with the money appropriated by the parliament, forest sector revenue, grants, donations, bequests or other gifts.</td>
</tr>
<tr>
<td>Kenya</td>
<td>Kenya Wildlife Service Fund (KWSF)</td>
<td>The Trust Fund’s main objective is to provide a sustainable source of funding for wildlife conservation and wildlife habitats to benefit present and future generations.</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Lesotho Forest Fund (LFF)</td>
<td>The LFF was set up under Section 7 of the Forestry Act 1998. The fund, under the control of the Principal Secretary of the Ministry of Agriculture, receives voluntary contributions plus all fees, monies, and fines collected under the Forest Act. The Government may use the Fund for forest management and research. Among other uses, the fund assists private, co-operative, or community forest owners; may pay for reforestation not otherwise required by law; and may provide materials or assistance to afforestation efforts. The Forest Act requires proper accounting of the LFF and annual audits by the Ministry of Finance.</td>
</tr>
<tr>
<td>Liberia</td>
<td>Environmental Conservation and Protection Fund (ECPF)</td>
<td>Chapter 15 of the National Forest Law from 2000 provides for measures to promote forestry and wildlife activities including the establishment of an Environmental Conservation and Protection Fund. The purposes of the fund are financing of all or part of activities designed to enhance the promotion and protection of environment; financing all or part of the Government’s programme for the conservation of wildlife and the bio-diversity eco-system; financing training in forestry and wildlife conservation; financing participation in organizations, at forestry conferences and international seminars dealing with the development of the forestry sector, with particular emphasis on reforestation, forestation, wildlife conservation and forest products; and financing the conduct by the Authority of Forest and Wildlife Assessments.</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Fonds Forestier</td>
<td>Special account under private management</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Fondation pour les Aires protégées et la biodiversité de Madagascar (Madagascar Biodiversity Fund) MBF</td>
<td>With the Malagasy Government, Conservation International and WWF as the first contributors, the Madagascar Biodiversity Fund is a private Malagasy foundation created in 2005 and declared as a public utility. The Foundation strives for the financial sustainability of Madagascar's protected areas and biodiversity. It carries out numerous actions that relate to the funding of the recurrent managerial costs of the protected areas and of projects that aim at reducing the pressures put on them, while addressing the needs of the populations. With USD 50 million in capital, the Foundation supports 1.7 million hectares of protected areas spread over 15 sites, which altogether cover one third of Madagascar Protected Areas System. Three parks are part of the UNESCO World Natural Heritage, the Atsinanana Humid Forests. Grants provided by the Foundation also positively impact 973,000 lives through the management of sites or identification of alternative activities.</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Fondation Tany Meva (FTM)</td>
<td>Tany Meva Foundation is a sustainable funding institution for environmental projects undertaken by local organizations and local communities. For that purpose, it assumes two main roles: the generation of financial resources and projects funding.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Fonds Forestier National is a special account under private management and directed by a management</td>
</tr>
<tr>
<td>Country</td>
<td>Fund</td>
<td>Description</td>
</tr>
<tr>
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<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Malawi</td>
<td>Forest Development and Management Fund</td>
<td>The Fund receives income from various sources and is disbursed to forest management, with special emphasis on working with local communities</td>
</tr>
<tr>
<td>Malawi</td>
<td>Malawi Environmental Endowment Trust (MEET)</td>
<td>The Malawi Environmental Endowment Trust (MEET) is a non-profit, independent organization registered in March 1999. MEET was established as a sustainable funding mechanism to ease the problem of late and limited funding. Through the management of a grant facility, the Trust supports priority activities developed in cooperation with the country's development partners.</td>
</tr>
<tr>
<td>Malawi</td>
<td>Mulanje Mountain Conservation Trust (MMCT)</td>
<td>The Mulanje Mountain Conservation Trust (MMCT) is an environmental endowment trust based in Mulanje and originally funded by the Global Environmental Facility (GEF) through the World Bank. The Trust works in collaboration with the Department of Forestry and other stakeholders in facilitating the raising of people's awareness, involvement and understanding of the importance of the conservation and responsible management of the biodiversity and natural resources in the Mulanje Mountain Forest Reserve and to ensure equitable sharing of benefits thereof.</td>
</tr>
<tr>
<td>Mauritania</td>
<td>The National Forest Development Fund (NFD)</td>
<td>The NFD was set up under Act No 97-007 (1997). The fund receives income from taxes and fees. It aims to support reforestation, regeneration and protection of forests in Mauritania.</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Forest and wildlife development fund (FWDF)</td>
<td>The Forest and Wildlife Act creates a forest and wildlife development fund, but gives no specifics on its sources of income or its use. Regulations have not yet been finalized.</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Forest Fund (FF)</td>
<td>Established with Law number 47 of 1969.</td>
</tr>
<tr>
<td>Senegal</td>
<td>Fonds Forestier National</td>
<td>Receives income from sales of forest products from government forests, and other sources; spends on government forest projects and on support to private and community forestry. Spending may go towards: (i) actions for protection and conservation of forests, including firefighting, management of hunting, fishing and exploitation, delimitation and surveillance of the forest domain, education, information, and “sensitization” of the population; (ii) actions for management, restoration of forest resources, and conservation of soils; (iii) infrastructure and equipment for the Service; and (iv) remuneration of temporary personnel, costs of displacement, uniforms, etc.</td>
</tr>
<tr>
<td>Seychelles</td>
<td>Seychelles Island Foundation (SIF)</td>
<td>Seychelles Islands Foundation (SIF) manages and protects the World Heritage Sites of Aldabra and Vallée de Mai. The foundation was established as a public trust in 1979, with the President of Seychelles as the patron. The Board of Trustees, appointed by the President, has 14 members, including not less than five representing organizations concerned with the conservation of wildlife and natural history.</td>
</tr>
<tr>
<td>Country</td>
<td>Fund</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Reforestation Fund (RF)</td>
<td>The Reforestation Fund was established in 1990 through forestry regulation.</td>
</tr>
<tr>
<td>South Africa</td>
<td>The National Forest Recreation and Access Trust (NFRA)</td>
<td>The NFRA was set up under the National Forests Act 1998 of South Africa. It aims to promote access to and the use of forests for recreation, education, culture or spiritual purposes. It receives donations and government funding. Funding is also raised by charging fees for goods and services provided by the forests.</td>
</tr>
<tr>
<td></td>
<td>Table Mountain Fund (TMF)</td>
<td>The Table Mountain Fund is an independent sustainable funding facility established to support the implementation of the CAPE Strategy and, specifically, the conservation of the globally significant biological diversity of the CFR and its adjacent marine systems. Founded by WWF in 1998 as an independent trust, the TMF was co-capitalized through investments from South African stakeholders, as well as GEF. The fund continues to be operated by WWF-SA.</td>
</tr>
<tr>
<td></td>
<td>National Forest Recreation Access Trust (NFRAT)</td>
<td>The National Forests Act creates a National Forest Recreation and Access Trust. The Trust may receive donations or government funding. It may also enter into contracts and charge fees for any services or goods it provides. The National Forests Act outlines clear procedures for keeping and auditing the Trust's accounts.</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Tanzania Forest Fund</td>
<td>This Fund is established as a non-profit organization and receives income from shares of forest fees and charges. It finances aspects of forest development, including education, research and community forestry.</td>
</tr>
<tr>
<td></td>
<td>Eastern Arc Mountains Conservation Endowment Fund (EAMCEF)</td>
<td>EAMCEF - The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is a trust fund that was established as a mechanism to provide for long-term, reliable and sustainable funding support to biodiversity conservation in the Eastern Arc Mountains of Tanzania. EAMCEF was officially registered in Tanzania on 6 June 2001, under the Trustees' Incorporation Ordinance No. 375 of 1956. It was set up as a joint initiative of the Government of the United Republic of Tanzania, WB and GEF. The Fund operates as a not-for-profit non-governmental organization (NGO).</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Forestry Development Fund (Zanzibar)</td>
<td>Income from various sources is to be used for a broad range of forest projects; fund establishment requires the approval of the Finance Ministry.</td>
</tr>
<tr>
<td>Tunisia</td>
<td>Fund for sylvo-pastoral development</td>
<td>Tunisia has a fund for sylvo-pastoral development, designed to encourage the participation of people, collective organizations and entities in the production of wood and forage, and the amelioration of economic and social conditions of forest populations.</td>
</tr>
<tr>
<td>Uganda</td>
<td>Tree Fund</td>
<td>The National Forestry and Tree Planting Act establishes the Tree Fund to promote “tree planting and growing at national and local levels” and supports tree planting and growing of a “non-commercial nature”.</td>
</tr>
<tr>
<td>Zambia</td>
<td>Forest Revenue Fund</td>
<td>Receives income from licences, fees, and concessions.</td>
</tr>
<tr>
<td></td>
<td>Forest Development Fund</td>
<td>Promotes wood processing industry and afforestation and reforestation programmes.</td>
</tr>
<tr>
<td></td>
<td>Fund for Joint Forest Management</td>
<td>Supports local forest management efforts.</td>
</tr>
</tbody>
</table>
### Regional forest funds

<table>
<thead>
<tr>
<th>Countries</th>
<th>Fund</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon, Central African Republic, Congo, Democratic Republic of Congo, Gabon, Rwanda, Sao Tome and Principe, Chad, Equatorial Guinea and Burundi</td>
<td>The Congo Basin Forest Fund (CBFF)</td>
<td>The CBFF was launched on 16 June 2008. CBFF is managed by the AfDB and supports Central African countries in conserving their unique forest biodiversity while at the same time creating income for local populations and reducing greenhouse gas emissions from deforestation and forest degradation. CBFF had total funds of almost 50 million euros in December 2010 (AfDB 2010).</td>
</tr>
<tr>
<td>Cameroon, Central African Republic, and Democratic Republic of Congo.</td>
<td>Fondation Tri-national de la Sangha (FTS)</td>
<td>The FTS is a conservation trust fund developed to protect the landscape of the Sangha forest. The fund counts on resources from the three governments, AFD, KfW, WWF, WCS, and the private sector (German Krombacher company). The fund consists of over 20 million euros.</td>
</tr>
</tbody>
</table>
Appendix 2

Forestry official development assistance and other support
Japan has been the most significant donor in Africa during the five-year period of 2006-2010, with almost one quarter of all contributions (see graph below). Of the other bilateral donors, Norway has also contributed with 11 per cent, and the UK, the US and Germany have each contributed 6 per cent. During the past decade, Japan has been a significant donor in the African forest sector, but its forest ODA contributions significantly increased even further in 2010 in comparison to earlier years. Norway had relatively fewer contributions in the beginning of the period, but its forest ODA contributions grew significantly in both 2009 and 2010. Also, contributions of the UK, Finland, Spain and Canada grew notably in 2009 and 2010. Contributions from the US and Germany have been decreasing during the period of 2006-2010.

Most significant donors according to official development assistance disbursements during 2006-2010
Of the multilateral sources, disbursements from the International Development Association (IDA), the EU and AfDB have been most significant. During 2002-2009, on average, two thirds of the forest sector ODA disbursements have come from bilateral sources, and one third from multilateral sources. This, however, changed significantly in 2010, when approximately 90 per cent of the disbursements came from bilateral sources; see graph below.

**Share of bilateral and multilateral official development assistance disbursements during 2002-2010**

![Graph showing share of bilateral and multilateral official development assistance disbursements during 2002-2010](Image)

Source: OECD CRS

Regarding forestry ODA in African countries, there have clearly been two thematic areas that have received most funds, namely forestry policy, administration and management; and forestry development\(^{34}\); see graph below. Notably, since 2008, the majority of the funding was directed to the thematic area of forestry policy, administration and management. It can be assumed that increased spending on REDD+ readiness and FLEGT could be included in this area, as both develop institutional capacities and policy and legal frameworks. Spending on fuelwood, training and services remained minor, although dependence on fuelwood and increasing demand for wood fuels are pressing issues in many countries in the region.

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\(^{34}\) Due to the type of classification, these categories can potentially include a wider variety of activities than other categories.
AfDB is regionally a significant financial institution. The Agriculture and Agro-Industry Department of the Bank manages the Congo Basin Forest Fund (CBFF) with some EUR 50 million of total funds as of the end of 2010. The Bank also finances other forest-related projects, and in 2012, approximately ten per cent of the indicative operational programme funding was used for agriculture and rural development, which includes forestry. The total forest portfolio was about USD 352 million in 2010 (Gondo 2010). According to the Advisory Group on Finance’s Collaborative Partnership on Forests study (2012), 21 countries in Africa benefit from the Bank’s forest sector financing.

In 2010, the share of grants from ODA disbursements in the forest sector in Africa was high, 82 per cent; see graph below. Loans comprised 5 per cent of ODA disbursements, and equity investments 13 per cent thereof. The change over the time period was the remarkable increase in equity investments, from USD 216,000 (which was the last reported figure) in 2007, to USD 32 million in 2010.

**Distribution of the forest sector official development assistance in 2010**

[Graph showing distribution of ODA disbursements by type in 2010]
The majority of the support, almost three quarters of the disbursed amount in 2010, was project-type support; see graph below.

**2010 distribution of forest sector official development assistance according to support type**

- Budget support: 72%
- Core contributions and pooled programmes and funds: 3%
- Project-type interventions: 22%
- Experts and other technical assistance: 3%
- Scholarships and student costs in donor countries: 3%

Source: OECD CRS

Budget support and technical assistance (TA) support were 3 per cent each, and core contributions and pooled funding contributed a little over one fifth, 22 per cent. The majority of the support (58 per cent) was delivered through the public sector; see graph below.

**Distribution of forest sector official development assistance by channel in 2010 (%)**

- Public Sector: 58%
- NGOs & Civil Society: 10%
- Public-Private Partnerships (PPP): 5%
- Multilateral Organisations: 22%
- Other: 5%
- To be defined: 3%

Source: OECD CRS

Data on Rio markers up to the year 2009 is available in the CRS. Since 2007, climate change disbursements sharply increased; see graph below. Similarly, biodiversity disbursements resumed an increasing trend in 2009 after a spike in 2007 and a following slump. However, desertification control disbursements remained modest.
Trend of forest sector official development assistance according to the Rio Markers (2002-2009)

Source: OECD CRS

Financing related to the Rio Conventions

The Rio Conventions, including the Convention on Biological Diversity (CBD), Convention to Combat Desertification (UNCCD) and Framework Convention on Climate Change (UNFCCC), were established in 1992. GEF operates as an independent financial organization and serves as a financing mechanism for the Rio Conventions\(^\text{35}\). Much of the ODA and climate financing under these themes is of a cross-sectoral nature relevant to forest and trees. Some of this financing is likely reported under sectors other than forestry and not included in the above analysis.

GEF is currently the largest funder of a wide range of projects that improve the global environment. It provides grant financing for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants\(^\text{36}\). Donors pledge financing for GEF, and it has been replenished five times; over USD ten billion for the first four rounds and USD 4.25 billion on the fifth round 2010-2013. Here, funding for biodiversity, climate change, land degradation and multifocal areas is considered relevant to forests and trees. Globally this funding, according to the GEF Project and Funding Database\(^\text{37}\), has amounted to 9.1 billion since 1991.

Globally the largest thematic portfolio of GEF in terms of projects is biodiversity, with over 1,000 national projects financed; see table below. However, in terms of funding, climate change is the largest thematic area, with projects grants of USD 3.6 billion. Co-financing forms a significant share of these funding flows: on average, about 16 per cent of this funding stems from GEF grants, and the remaining 84 per cent comes from co-financing.

\(^{35}\) It is also a financing mechanism for the Stockholm Convention on Persistent Organic Pollutants (POPs)

\(^{36}\) www.thegef.org

\(^{37}\) http://www.thegef.org/gef/gef_projects_funding
### Number of Global Environment Facility projects globally and in Africa

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>National projects*</th>
<th>Regional projects*</th>
<th>Africa national projects</th>
<th>Africa** regional projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity</td>
<td>1006</td>
<td>151</td>
<td>323</td>
<td>23</td>
</tr>
<tr>
<td>Climate change</td>
<td>859</td>
<td>115</td>
<td>288</td>
<td>14</td>
</tr>
<tr>
<td>Land degradation</td>
<td>94</td>
<td>30</td>
<td>49</td>
<td>5</td>
</tr>
<tr>
<td>Multifocal area</td>
<td>324</td>
<td>105</td>
<td>97</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: [http://www.thegef.org/gef/gef_projects_funding](http://www.thegef.org/gef/gef_projects_funding)

(*) GEF projects globally
(**) in GEF project database those regional projects that have “Africa” in the name of the project

### Global Environment Facility total funding for biodiversity, climate change and land degradation projects, billion USD

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>National</th>
<th>Regional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEF grant</td>
<td>Co-financing</td>
<td>GEF grant</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>2.4</td>
<td>7.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Climate change</td>
<td>3.0</td>
<td>23.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Land degradation</td>
<td>0.3</td>
<td>1.9</td>
<td>0.1</td>
</tr>
<tr>
<td>Multifocal area</td>
<td>0.8</td>
<td>5.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: [http://www.thegef.org/gef/gef_projects_funding](http://www.thegef.org/gef/gef_projects_funding)

According to the GEF Annual Report (2010), Africa was the third largest recipient of GEF financing, with 20 per cent of GEF investment (in comparison, Latin America received 23 per cent). According to the GEF database, there have been 757 national projects in African countries comprising 33 per cent of all national project funding on biodiversity, climate change, land degradation and multifocal projects.

Within the African continent, GEF funding is relatively evenly distributed among the countries. Nigeria\(^{38}\) (9 per cent), South Africa (8 per cent) and Uganda (6 per cent) were the biggest single beneficiaries. Thematically there are differences among the countries; see the graph below.

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\(^{38}\) The bulk of Nigeria’s financing comes from co-financing (USD 500 million) of the Nigeria Erosion and Watershed Management Project, which is recorded under the multifocal category in the GEF project database.
The funding is not focused on forest-rich countries. Geographically speaking, the Central African countries (apart from DRC and Cameroon) have received limited funding. There are no other significant differences between the regions. Within regions, there are one or two larger recipients in each region. Regarding the Congo Basin countries, DRC and Cameroon have a high proportion of biodiversity financing, but the group in general does not account for a large share of the total financing.

**Global Environment Facility financing for biodiversity**

Since 1991, the GEF biodiversity portfolio has provided approximately USD 3 billion in grants, and has leveraged about USD 9 billion in co-financing. According to GEF (2010), this support has included over 1,000 biodiversity projects in more than 155 countries.

In terms of national biodiversity projects in African countries, the GEF grants have been USD 0.8 billion, and co-financing has been USD 2.3 billion. The share of biodiversity-relevant project financing in African countries is approximately one third; see graph below. Of 54 African countries, all but Libya, Somalia and South Sudan have received GEF funding for biodiversity. Those three countries have received negligible or no funding from GEF. Within the continent, South Africa and Madagascar dominated, with respectively 14 and 12 percent of all biodiversity financing. Congo Basin countries, having rich forest and biodiversity, received less than one fifth, and most of the financing was directed to two countries in the group, DRC and Cameroon.

Africa has several biodiversity hotspots. These are, for example, the remaining coastal forests in East Africa located in Kenya, Tanzania and Mozambique; Succulent Karoo in Namibia and South Africa; and Guinean forest in many West African countries such as Nigeria, Ghana, the Ivory Coast, Liberia, and Sierra Leone. Many of these countries have received relatively more funding, especially South Africa, Nigeria, Uganda, Ghana and Madagascar. However, some countries, although containing biodiversity hotspots, such as Sierra Leone and Mozambique, have received relatively limited assistance in the context of biodiversity.

**African countries’ share of total national-level Global Environment Facility financing, according to thematic area (%)**

<table>
<thead>
<tr>
<th>Biodiversity</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td>18%</td>
</tr>
<tr>
<td>Land degradation</td>
<td>64%</td>
</tr>
<tr>
<td>Multifocal</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>24%</td>
</tr>
</tbody>
</table>

National projects in African countries
Global Environment Facility financing for land degradation

GEF also generates financing for controlling land degradation. In comparison to the global biodiversity and climate change portfolios, the land degradation portfolio is smaller. GEF has funded regional and national land degradation-related projects with approximately USD 400 million and has generated over USD 2 billion in co-financing.

African countries have received almost two thirds of the total of the national-level GEF financing for land degradation. Within the continent, almost 90 per cent was directed to West and East Africa. In West Africa, Burkina Faso, Niger and Nigeria are the largest recipient countries. Almost half (46 per cent) of the financing for land degradation in Africa went to LFCCs.

The Global Mechanism (GM) is a subsidiary body of UNCCD. It facilitates member countries’ access to finance and provides seed money and technical assistance. For the biennium 2010-11, GM core and extra-budgetary resources were approximately USD 6.7 million (GM 2011). GM directed the largest share of financing to African countries.

Climate finance through the Global Environment Facility and other sources

United Nations Framework Convention on Climate Change

Various financing mechanisms and facilities have been established since the Bali (2007) United Nations Climate Change Conference, which approved compensation for tropical countries for emission reductions from deforestation and forest degradation. The UNFCCC has entrusted part of its financial mechanism to GEF. Climate change is by grant volume the largest thematic area of GEF funding. GEF invests in management of land use, land-use change, and forestry (LULUCF), all relevant to forest and climate change. Total investment in the thematic areas was a USD 3.6 billion GEF grant and USD 25.4 billion in co-financing for national and regional projects. However, Africa has received less than one fifth of all national level financing, about USD 4.6 billion. Within the continent, East and West Africa have received two thirds of GEF climate funding. Of the individual countries, Uganda and South Africa were the largest recipients, together receiving a fifth of all national financing to African countries.

GEF also manages two separate funds focused on adaptation that are established under the UNFCCC. The Special Climate Change Fund (SCCF) was established in 2001. To date it has received contributions worth USD 120 million. The Fund aims to support climate change projects complementary to those funded by GEF or bi- and multilateral sources. The Least Developed Countries Trust Fund (LDCF) supports the 48 LDCs that are especially vulnerable to the adverse impacts of climate change. To date, the fund has mobilized contributions of approximately USD 180 million. The target for the future is to reach USD 0.5 billion, which is the amount the UNFCCC has estimated to be necessary for financing NAPA implementation in LDCs.

In addition, the Green Climate Fund (GCF) was established in 2010 by the UNFCCC COP 16 to support the objectives of the UNFCCC, and it is intended to be the main fund for global climate change finance. The capital is aimed to be USD 100 billion per year until 2020 (FCCC/CP/2010/7/Add.1). In October 2012, the Board of the GCF selected Korea to host the fund. The World Bank is set to be the interim trustee of the fund. The fund is not yet disbursing.

The Adaptation Fund (AF) of the Kyoto Protocol is capitalized through the Clean Development Mechanism (CDM) (share of proceeds from project activities) and other sources of funding.

39 http://www.thegef.org/gef/trust_funds
GEF provides secretariat services, and the World Bank is the trustee of the fund40. Since 2010, total approved financing has been USD 166 million, of which one third has been directed to African countries41. Of this financing, over half went to East African countries.

**REDD+ financing modalities**

Reducing emissions from deforestation in developing countries was introduced for discussion in UNFCCC COP in 2005. In Bali 2007, an agreement was reached on the urgent need to take action on REDD. During the process, the concept has been augmented with the “plus”, encompassing conservation, sustainable management of forests and enhancement of forest carbon stocks. Besides afforestation and reforestation, under the CDM, much discussion in UNFCCC on forest carbon is centred on REDD+ in addition to negotiations on Land Use, Land Use Change and Forestry within the Kyoto Protocol. Specific to financing under the Convention, it has been agreed that “results-based finance provided to developing country Parties that is new, additional and predictable may come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources”42.

A phased approach has been decided on to facilitate preparation for REDD+ in countries with differing situations. The first two phases concentrate on the creation and implantation of national policies, strategies and action plans as well as on capacity building and stakeholder engagement activities. Measured, reported and verified activities with performance-based payments come in the expected third phase. The financing for the third phase should come from the private sector, and REDD+ could potentially be linked to compliance markets.

Since 2008 over USD 6 billion43 is estimated to be available for REDD+. Norway has contributed almost half of the funds, and Japan almost one quarter of them. Multilateral sources operating in REDD+ financing are, for example, UN-REDD, FCPF, ITTO, and PROFOR. **UN-REDD** is the United Nations collaborative programme on REDD+. It was established in 2008 and has 46 partner countries and approximately USD 118 million in deposits to date. UN-REDD has a national programme in five African countries and other support in 12 countries; see table below. One fifth of the approved budget of UN-REDD for country programmes is directed to African countries. A significant majority of the contributions (89 per cent) come from Norway.

**The FCPF** was established in 2008 to support country-level demonstration of REDD+. The Facility has focused on readiness. FCPF has two funding mechanisms, the Readiness Fund and the Carbon Fund, which together have raised USD 457 million. The facility supports 36 countries, 13 of which are in Africa44; see table below. The committed funding of FCPF since 2009 is USD 236 million.

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40 These institutional arrangements are currently being reviewed
41 Djibouti, Egypt, Mauritania, Tanzania, Madagascar, Mauritius, Eritrea, Senegal
43 http://reddplusdatabase.org/
44 http://www.forestcarbonpartnership.org/fcp/node/203
### African countries in UN-REDD, FCPF and FIP

<table>
<thead>
<tr>
<th>Country</th>
<th>UN-REDD partner country</th>
<th>FCPF participants</th>
<th>FIP pilot countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>C.A.R</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congo</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DRC</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Liberia</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>X*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
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</tr>
<tr>
<td>Sudan</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>X*</td>
<td></td>
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</tr>
<tr>
<td>Uganda</td>
<td>X</td>
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<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>X*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) UN-REDD country programme

According to ITTO (2009), “**REDDES Programme has a strategic focus on reducing deforestation and degradation through sustainable management of primary forests, and restoration and rehabilitation of secondary forests and degraded areas with a view of enhancing all the environmental services provided by tropical forests**”. The pledges received under REDDES amount to over USD 9 million, which is about half of the programme’s indicative budget of USD 18 million for the pilot phase (ITTO 2012). During the 2009-12 cycles, the share for African countries from the total funding was 14 per cent, or approximately 2.4 USD million. Four African countries received funding: Ghana, Cameroon, Liberia and Togo. Of these countries, Ghana and Cameroon received over two thirds of the funding.

In addition to financing REDD+ projects, there are also funds for purchasing carbon from forest-relevant projects (including A/R and REDD+). For example, the Biocarbon Fund is administered under the World Bank. Also, in 2013 the Carbon Fund under the FPCF will start providing payments for verified emission reductions from REDD+ programs in countries that have made considerable progress towards REDD+ readiness.

The Climate Investment Funds (CIF), including the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), help developing countries pilot low-emissions and climate-resilient development. The Forest Investment Programme (FIP), established in 2008, is a targeted program of the Strategic Climate Fund. FIP “**supports developing country efforts to reduce deforestation and forest degradation and promote sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks**”. FIP focuses on large scale investments in a smaller number of key countries to achieve economic transformation and generate global knowledge. The FIP is currently active in eight pilot

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45 ITTO and counterpart funding  
46 [https://climateinvestmentfunds.org/cif/node/5](https://climateinvestmentfunds.org/cif/node/5)
countries, three of which are in Africa; see table above. Currently, USD 639 million has been pledged to FIP.

Forest Law Enforcement, Governance and Trade

According to PROFOR (2009), “Poor forest governance can cost governments and forest owners as much as USD 15 billion annually because of losses from illegal logging and evasion of forest charges.” In the past decade, donors have significantly generated financing to support efforts to enhance Forest Law Enforcement and Governance (FLEG/T).

One major initiative is the EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan initiated in 2003. The EU is one of the largest single markets for tropical timber, and the origin and legality of timber entering the market is of major concern. The Action plan aims to prevent importing of illegal wood into the EU, to improve the supply of legal timber and to increase demand for wood coming from responsibly managed forests; hence, it also supports SFM. Support for implementing the EU Action Plan is financed by both the European Commission and European bilateral donors. Part of the support is channeled through the EU FLEGT Facility hosted by the European Forest Institute (EFI). Total reported financing during 2003-2011 was EUR 608 million. During the period, the support to regional and national efforts in African countries consisted of almost half of the total funding. Within the continent, the Congo Basin and West African countries account for most of the allocated funds. Of the individual countries, Gabon, Ghana and Cameroon received the largest shares of funding. Significant recipients of this funding are, as expected, those countries that have large forest resources and that export timber or wood products.

A multi-donor trust fund for the Forest Law Enforcement and Governance (FLEG) partnership was established in 2004. In 2009, the partnership merged with PROFOR and now is part of the governance portfolio of PROFOR. In 2009, PROFOR committed 1.2 million to governance related work. Majority of the support went to Latin American (65 per cent) and Asian (25 per cent) countries and regional support. A minor share was directed to African countries (10 per cent).

Also ITTO finances activities relevant for FLEGT. ITTO has TFLET programme with foreseen budget of USD 15 million for 2009-2012. According to ITTO (2012) USD 6.9 million was pledged by October 2012. African countries received 28 per cent of the funding when analyzing financing for TFLET during 2009-12 rounds. Most of this disbursement went to Cameroon and Ghana.

African countries receive a significant share of the total funding available for forest law enforcement, governance and trade from various sources. Within the continent Cameroon and Ghana attract significant share of the FLEG relevant funding. The EU is the largest donor of the thematic area and the share of African countries of the EU financing is higher than other regions. However, in the relatively smaller portfolios of ITTO and PROFOR, other regions attract more financing.

Processes supporting forest financing

Besides the significant efforts of the UNFF in facilitating access to forest financing, the Advisory Group on Finance of the Collaborative Partnership on Forests, with support of PROFOR has put major inputs into studying forest financing at global level. Other organizations have also supported this crucial area.

47 FLEGT Action Plan Progress Report 2003-2010. The Report notes that “amounts reported here should be taken as a rough indication of undertakings and financing made available”.
48 Gabon had a high figure for financing due to one debt swap of EUR 60 million
49 ITTO financing cycles during 2009-2012
Since 2005, FAO, together with the National Forest Programme Facility, has supported the development of national forest financing strategies (NFFS) in various countries. According to FAO, “This is a focused capacity building effort to better understand the variety and effectiveness of various financing options and help the key stakeholders develop a country specific comprehensive forest financing strategy”. The work was initiated as a sequel to a Dutch government-supported project in Latin America that analyzed forest financing in 19 countries and conducted regional and sub-regional syntheses. The process of holding dialogues and discussions among forest, finance, and other key stakeholders to develop and implement NFFS and selected forest financing instruments to support SFM has taken place in the following countries: Guatemala, Suriname, El Salvador, Peru (December 2008), Paraguay, Costa Rica, the Philippines and Ecuador. At least two African countries have also been supported, namely Namibia (October 2007) and Uganda (2010).

ITTO has organized regional forums on forest investments, and these have included e.g. the 2007 West and Central Africa Tropical Forest Investment Forum: Issues and Opportunities for Investment in Natural Tropical Forests. According to ITTO, the Forum was convened to explore ways to improve the relative attractiveness of private and/or institutional investments in natural tropical forests in West and Central Africa.

The Forest Investment Forum was convened in October 2003 at the World Bank Headquarters in Washington, DC. It discussed opportunities for investments in environmentally and socially sustainable forestry in developing and economically transitioning countries. The Forum was organized jointly by the World Bank, the International Finance Corporation (IFC), the World Business Council for Sustainable Development (WBCSD), WWF, the Programme on Forests (PROFOR), and Forest Trends. In 2006, PROFOR also organized the Eastern and Southern Africa Regional Forest Investment Forum in South Africa.

UNEP has a Financing Initiative (FI) which is a global partnership between UNEP and the financial sector. According to UNEP FI, over 200 institutions (banks, insurers and fund managers) work with UNEP to understand the impacts of environmental and social considerations on financial performance. Its activities include research on the “business case” of internalizing environmental, social and government externalities; and international, national and regional seminars and conferences.

CBD works actively on biodiversity financing and has also supported development of The Little Biodiversity Finance and The Little Forest Finance books.
Appendix 3

Innovative forest financing modalities
Forest Carbon

Historical global transacted volume (in MMTCO2e) by project type

Kasigau Corridor REDD+ project

The absence of an international regime for REDD projects means there are precious few examples of successful private sector projects in this sector. However, one project that has often been quoted is the Kasigau Corridor REDD project. The project is protecting 200,000 hectares of dryland forest in southeastern Kenya that forms a corridor between two national parks, Tsavo East and Tsavo West. This dryland forest is under intense threat from slash and burn agriculture due to local population expansion. The project builds on Wildlife Works’ First REDD+ project (Phase I, Rukinga Ranch) which has been protecting forests, flora and fauna since 2006. The aim of this new, larger project is to bring the benefits of direct carbon financing to surrounding communities (consisting of nearly 150,000 rural Kenyans), while simultaneously addressing alternative livelihoods and protecting vital flora and fauna. Human-wildlife conflict has been a problem in the past, as local agents are directly reliant on the environment as a means for subsistence.

In 2010, BNP Paribas bought a multi-million-dollar option for a senior tranche of USD 1.25 million credits from the project, with an upside-sharing mechanism. The deal enabled Wildlife Works to undertake the current second phase of the project. Phase II is expected to avoid more than 1 million tons of carbon dioxide equivalent per year for the next 30 years. In May 2011, it received its first offsets validated to both the Climate Community and Biodiversity (Gold Level) and the Verified Carbon Standards – these offsets have found buyers among major companies such as sportswear firm Puma and Dutch utility Eneco.

The first phase was funded by the deal with South Africa’s Nedbank that helped preserve an initial 30,000 hectares. BNP Paribas has also taken an exclusive option on Wildlife Works’ future REDD+ projects in exchange for project start-up financing of USD 50 million. With this backing, Wildlife Works can extend its model of REDD+ financed conservation to other threatened forests in Africa.

According to Christian del Valle, director for environmental markets at BNP Paribas in London, the structure seems to have worked because it provided the necessary capital to increase activity, while at the same time not placing an unrealistic or unworkable obligation on the project implementer or land-use rights owners.

The project is also about more than just protecting an area of land from logging. Creating economic development for the community is vital and offers direct employment to rangers; also, the project supports a school, a clothing factory and a greenhouse for cultivating drought-tolerant crops that local people can grow. Among the most important lessons learnt is that it is absolutely crucial to design a structure that allows for all stakeholders to have their needs met and maintain aligned interests over the long term.

Source: Modified from the Environmental Finance webpage article50, Wildlife Works’ project brief51, and the Kasigau Corridor REDD Project, Phase II - VCS Project Description

51 http://www.coderedd.org/redd-project/wildlife-works-carbon-kasigau-corridor/
Payment for ecosystem services

Programmes and payment structures for watershed services in Eastern and Southern Africa

**PWS and Poverty Alleviation: Working for Water in South Africa**

The Working for Water (WfW) Programme in South Africa is a government-led watershed rehabilitation project aiming at alleviating poverty through the provision of temporary work and skills development on watershed enhancement projects, involving mainly the removal of invasive alien plants. WfW trains teams to remove alien invasive plant species and thereby improve water supply. The Programme also trains the team leaders to cost the work and develop quotes for buyers. A monitoring program is in place for follow-up work. Although most of the funding comes from the government’s poverty relief fund, water users also contribute either through the government’s water management fees or through individual regular donations. As noted in the Katoomba Group PES inventory for South Africa, costs per “job” created are also the most efficient of all of the poverty relief programs of the national government.

**Rewarding Land Management Approaches that Result in Watershed Services: The Equitable Payments for Watershed Services Programme (EPWS) in Tanzania**

CARE International in Tanzania, in partnership with WWF, the International Institute for Environment and Development (IIED), and the Poverty Reduction & Environmental Management Program (PREM), initiated a new project in 2006, Equitable Payment for Water Services (EPWS). The program is based in the Uluguru and East Usambara mountains, focusing on Ruvu and Sigi River basins, which are the main sources of water to the cities of Dar es Salaam and Tanga, respectively. The City of Dar es Salaam provides water to some four million inhabitants and roughly 80 per cent of industries in the whole country. The public water utility, Dar es Salaam Water Supply and Sewerage Corporation (DAWASCO), currently spends nearly USD 2 million per year in water treatment costs due to increased sediment load in the Ruvu River, which feeds the city’s water supply.

The Equitable Payments for Watershed Services (EPWS) programme aims to improve the quality and flow of water for downstream users by compensating upstream farmers for engaging in various land-use practices that control soil erosion due to unsustainable farmland expansion and irrigation practices, deforestation, and illegal mining activities in river systems and within forest reserves. The project aims to establish long-term financial investment in modifying land use to conserve and improve watersheds for reliable flow and quality of water to establish a compensation mechanism that recognizes the needs and priorities of marginalized and poor people, and to improve quality of life of communities through substantial benefits to the rural poor, hence contributing to poverty reduction. As of 2008, DAWASCO and the partnering Coca-Cola Company had enrolled more than 450 farmers.

Source: Modified from Stanton et al (2010)
The Community Areas Management Programme for Indigenous Resources, in Zimbabwe

The Community Areas Management Programme for Indigenous Resources (CAMPFIRE) is a community-based natural resources management programme developed by the Government of Zimbabwe in the late 1980s. The programme was principally designed to promote the sustainable utilization of natural resources and to conserve the rich natural heritage of Zimbabwe through the generation of income for rural communities. CAMPFIRE begins when a rural community, through its elected representative body, the Rural District Council (RDC), asks the government's wildlife department to grant them the legal authority to manage its wildlife resources, and demonstrates its capacity to do so. In granting people control over their resources, CAMPFIRE makes wildlife valuable to local communities because it is an example of economically and ecologically sound land use.

Most communities sell photographic or hunting concessions to tour operators under rules and hunting quotas established in consultation with the wildlife department. Others choose to hunt animal populations themselves, and many are looking at other resources, such as forest products. The revenues from these efforts generally go directly to households, which in deciding how to use the money, often opt for communal efforts such as grinding mills or other development projects. The councils, however, have the right to levy these revenues. The general structure of the CAMPFIRE scheme is presented in the figure below.

Concession areas and hunting/ecotourism rights are normally auctioned or decided on the basis of tenders received. This has pushed prices upwards, close to a genuine market price for the service being provided. The scale of benefits has varied greatly across districts, wards and households. 12 of the 37 districts with authority to market wildlife produced 97 per cent of all CAMPFIRE revenues, reflecting the variability in wildlife resources and local institutional arrangements. According to Frost and Bond (2008), only sport hunting has generated sufficient revenue in these communal areas to be considered an economically viable form of land use under the present circumstances. Between 1989 and 2001, it generated 89 per cent of the CAMPFIRE revenues. The combined total of all activities amounted to more than USD 20 million. The Programme has been widely emulated in southern and eastern Africa.

Frost and Bond (2008) suggest five main lessons from CAMPFIRE for emerging PES schemes: 1) community-level commercial transactions can seldom be pursued in isolation; 2) non-differentiated payments weaken incentives; 3) start-up costs can be high and may need to be underwritten; 4) competitive bidding can allow service providers to hold on to rents; and 5) schemes must be flexible and adaptive.

Source: Combined and summarized from Frost and Bond (2008); Bond and Frost (2005); and CAMPFIRE webpage (http://www.campfirezimbabwe.org/)

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Debt-for-nature swaps

Financing for forest protection through debt-for-nature swap in Cameroon

France and Cameroon signed the first ever Central African debt-for-nature swap in 2006. The agreement assured investment of at least USD 25 million within five years to protect parts of the Congo Basin, which contains the world's second largest tropical forest and is home to a broad range of wildlife as well as indigenous groups such as the Ba'Aka pygmies.

The agreement came from France's Debt Development Contract (C2D), which complements the Heavily Indebted Poor Countries (HIPC) Initiative, a joint initiative of the World Bank and International Monetary Fund. The goal of the HIPC Initiative is to reduce the excessive debt faced by the world's poorest nations. The goal of C2D is to provide complete debt relief of the concessional loans France contracted to other countries. In 2006, 22 countries were eligible for C2D, and the total amount of C2D debt relief was USD 4.6 billion.

The document required Cameroon to earmark funds among four different sectors: education, health, infrastructure and natural resources. This was the first C2D agreement to allocate funds to natural resources, and the funds were directed to the Forest and Environment Sector Programme. Within the Programme, the funds were earmarked for an increase in the environmental management of forest activities, community resource management, training and research, and the sustainable management of resources.


Green Bonds

It is clear that the financing currently available is not enough to maintain the natural forest capital; to manage forests; and to combat climate change, deforestation and forest degradation. It is also clear that ODA alone cannot meet the financing needs and is not necessarily the proper financing modality in view of the vast variety of activities in the forest sector. In many instances, the private sector, sometimes in partnership with the public sector, can generate the necessary financing. According to Cranford et al. (2011), forest bonds are one option for this financing and can leverage additional finance from global capital markets. According to AGF (2012), in 2010, forests represented only a small portion of the USD 3.5 billion of green bonds issued. There is currently no information available concerning whether forest bonds have generated financing for investments in African countries or how much the volume of such investments would be.
Appendix 4

Private sector financing
Examples of value adding industries are pulp and paper companies, sawmill industries, and bioenergy facilities (see box below). This type of facilities typically invests in plantations to guarantee raw material supply. These may (at least in theory) also include forest concession companies because they are often required to invest into value adding processing as part of the concession contract.

Examples of industrial investors active in Africa

**Mondi**
The Mondi Group is an international forestry company operating in 29 countries located across the globe. Its headquarters are in Johannesburg, South Africa. It is one of the main landowners and producers of paper and other wood-based products in South Africa. The company provides employment to about 19,000 people in the country. The company is a large investor in forest plantations in South Africa. It owns and manages more than 307,000 ha of plantations in the country and it works towards the development of local timber growers in South Africa. The company has made significant capital investments since 2004 to ensure that its operations attain international standards in terms of product quality, competitive costs and environmental management. It also manages a number of non-afforested areas including wetlands, grassland and indigenous forest ecosystems for biodiversity conservation and environmental protection purposes.

**Sappi**
The Sappi Group is an international forestry company operating in more than 100 countries. Sappi Southern Africa represents both the Group in South Africa and a number of countries in the Southern African region. The company mainly produces pulp, paper and paper-based products. It also has a significant amount of investment in forest plantations. The company owns and manages 567,000 ha of commercial tree plantations in the region. Moreover, it has approximately 150,000 ha of native forests and wetlands managed for conserving natural habitats and biodiversity.

**KVTC Tanzania**
The Kilombero Valley Teak Company (KVTC) was established in 1992. It operates in Tanzania. The main shareholders of the company include the Global Environment Fund and the Finnish Finnfund. It mainly plants and manages teak (Tectona grandis) plantations. It has thus far established 8,200 ha of teak plantations. It has also invested in sawmill and secondary processing facilities to utilize and add value to wood from these plantations. The company also manages 20,000 ha of native forests and wetlands mainly for biodiversity conservation.


Timber investment management organizations (TIMOs) invest into plantations, and various African countries have active TIMOs. For example, Green Resources is active in Uganda, Tanzania and Mozambique (see box below). According to Indufor (2012b), the total value of professionally managed timberland assets has currently grown to USD 70-80 billion at the global level, with much potential still untapped.

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54 In addition to plantations, Green Resources also has other investments, such as sawmilling facilities in Tanzania
Funds are invested into forestry either through loans and/or equity. They can also be invested through TIMOs. TIMO investors have a potentially long-term investment perspective, so forest and forest land assets are interesting for various reasons: i) the forest asset provides protection against inflation; ii) forests are natural capital, i.e. forest volume and value growth are not tied to economic fluctuations; and iii) portfolios including forest assets are performing – at a given risk level they offer higher returns; and iv) there is a constantly increasing demand for wood (Indufor, 2012b).

In African countries, investment into tree plots by small and medium-scale domestic investors is on the rise. Banks and other finance sector agents mainly finance forestry through loans and guarantees. However, in some African countries, the local banks are not interested in financing forestry investments, mainly due to the long pay-back period of such investments.

**Example of TIMO investment in Africa**

<table>
<thead>
<tr>
<th><strong>Green Resources</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Green Resources is a private Norwegian company. Its business areas include tree plantations, carbon offset, forest products and renewable energy. In Africa, the company mainly operates in Mozambique, Tanzania and Uganda. It also has a small operation in Southern Sudan. The company has so far invested USD 100 million into its African operations. It has 22,000 ha of tree plantations, which are used to generate carbon credits, produce bioenergy and manufacture wood products. It uses both native and exotic tree species for plantations. The species used in the plantations include <em>Cupressus lusitanica</em>, <em>Eucalyptus camaldulensis</em>, <em>E. globulus</em>, <em>E. grandis</em>, <em>E. saligna</em>, <em>Gmelina arborea</em>, <em>Grevillea robusta</em>, <em>Khaya anthotheca</em>, <em>Pinus caribaea</em>, <em>P. patula</em>, <em>P. oocarpa</em> and <em>Tectona grandis</em>. In addition, the company holds more than 300,000 ha of land for future planting and conservation.</td>
</tr>
</tbody>
</table>

Source: [http://www.greenresources.no/Home.aspx](http://www.greenresources.no/Home.aspx) (accessed November 2012)
Industrial forest plantations by region in 2012 (Mha)

Total 54.3 million ha

- Asia
- North America
- Latin America
- Africa
- Oceania
- Europe


Private sector plantation investment share by region in 2011

- Latin America: 83%
- Asia & Oceania: 16%
- Africa: 1%

Source: Indufor Plantation Database
Appendix 5

Demand for forest finance
Kenya forest policy and Uganda NFP on forest financing

**Kenya forest policy on financing**
The policy notes that the funding of forestry activities has mainly been from the Treasury and from development partners, and that it has been inadequate for the efficient management and conservation of the country’s forest resource. It notes that with the establishment of the Kenya Forest Service, it is necessary to broaden the funding base, including putting in place a forest conservation and development trust fund.

Sources of funds to support forestry activities will be through:
- Revenue generated from improved management of plantation forests.
- Levies and royalties imposed on services such as the conservation of water catchment, leases and concessions.
- Funds from the Government.
- Funds from development partners and other agencies
- Funds available at the international level for the sequestration of greenhouse gases, conservation of biological diversity, protection of water catchments, and combating of desertification.

**Uganda NFP2 on financing**
One of the priority programmes in NFP2 (2012-2022) is forest financing. It has a number of objectives including, among others, i) mobilizing “conditional grants” for District Local Governments, ii) operationalizing the Tree Fund provided for under National Forestry and Tree Planting Act (NFTPA) of 2003, iii) developing economic instruments for funding SFM, iv) mainstreaming tree planting in all public and private sector development programmes, v) promoting private-public partnerships to enhance forest sector financing and mobilizing long-term low-interest finance from financial institutions for SFM. The NFP is required by the law (NFTPA section 49) and has been mainstreamed in the National Development Plan (Uganda’s equivalent of a PRSP).

Tunisian NFP investment program (USD Million – 2007 prices)

<table>
<thead>
<tr>
<th>Task</th>
<th>Short-term</th>
<th>Medium-term</th>
<th>Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007-2011</td>
<td>2012-2016</td>
<td>2017-2030</td>
</tr>
<tr>
<td>Afforestation and Forest Management</td>
<td>25.4</td>
<td>102.0</td>
<td>45.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>181.3</td>
<td>128.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>398.4</td>
</tr>
<tr>
<td>Prevention of range land degradation</td>
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<td>42.2</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>71.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>165.6</td>
</tr>
<tr>
<td>Development of forest products</td>
<td>31.6</td>
<td>3.9</td>
<td>16.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>59.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.4</td>
</tr>
<tr>
<td>Capacity building</td>
<td>0.0</td>
<td>10.9</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>43.0</td>
</tr>
<tr>
<td>Participation of local communities</td>
<td>0.0</td>
<td>1.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>57.0</td>
<td>160.5</td>
<td>65.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>277.7</td>
<td>120.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>633.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>217.6</td>
<td>343.4</td>
<td>834.0</td>
</tr>
<tr>
<td>Amount/year</td>
<td>11.4</td>
<td>32.1</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>55.5</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45.3</td>
</tr>
<tr>
<td>Total/year</td>
<td>43.5</td>
<td>68.7</td>
<td>59.6</td>
</tr>
</tbody>
</table>


Financing in the context of the climate agenda

According to AGF (2012), based on an analysis of readiness plans in 21 countries that report to the FCPF, UNREDD or both, the average costs of the REDD+ preparedness phase vary from USD 4 million to USD 27 million per country.

The demand for financing related to REDD+ has been articulated through e.g. FCPF R-PPs and UNREDD NDPs for REDD+ readiness and for subsequent investments in FIP. UNREDD notes that investment plans produced for the FIP process, to the extent feasible, should avoid duplication of other activities proposed in the R-PP. Ideally, these investment plans will be built on and be reflected within R-PP activities, in order to promote synergies between the readiness and investment phases of REDD+. Hence, there should not be a major overlap in funding needs as indicated in the table below. In the table, the financing demand is as detailed in the R-PPs and the FIP investment plan, and the supply is as detailed in VRD (Nov 2012).

The comparisons can be indicative at best. The supply-side amounts reported in VRD are cumulative from 2006, so comparisons should be made with care as the demand side documentation has been established more recently during 2010-2012. VRD also includes all types of funding, even funding for demonstration, and does not only report on readiness.
REDD+ financing demand and supply in selected African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>R-PP budget, MUSD</th>
<th>establised</th>
<th>FIP investment plan MUSD</th>
<th>Disbursements, MUSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>6.8</td>
<td>2012</td>
<td>20-30</td>
<td>71.0</td>
</tr>
<tr>
<td>DRC</td>
<td>22.7</td>
<td>2010</td>
<td>40-60</td>
<td>184.3</td>
</tr>
<tr>
<td>Cameroon</td>
<td>88.9*</td>
<td>2012</td>
<td>-</td>
<td>71</td>
</tr>
<tr>
<td>CAR</td>
<td>6.7</td>
<td>2011</td>
<td>-</td>
<td>21.0</td>
</tr>
<tr>
<td>Gabon**</td>
<td>n.a.</td>
<td>-</td>
<td>-</td>
<td>24.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>7.3</td>
<td>2010</td>
<td>50</td>
<td>37.1</td>
</tr>
<tr>
<td>Congo, Rep.</td>
<td>11.5</td>
<td>2011</td>
<td>-</td>
<td>14.9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>7.6</td>
<td>2011</td>
<td>-</td>
<td>38.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>10.4</td>
<td>2010</td>
<td>-</td>
<td>27.8</td>
</tr>
<tr>
<td>Liberia</td>
<td>4.9</td>
<td>2011</td>
<td>-</td>
<td>18.4</td>
</tr>
<tr>
<td>Madagascar</td>
<td>5.5</td>
<td>2010</td>
<td>-</td>
<td>8.5</td>
</tr>
<tr>
<td>Mozambique</td>
<td>23.8</td>
<td>2012</td>
<td>-</td>
<td>34.3</td>
</tr>
<tr>
<td>Tanzania</td>
<td>10.0</td>
<td>2010</td>
<td>-</td>
<td>87.0</td>
</tr>
<tr>
<td>Uganda</td>
<td>5.2</td>
<td>2011</td>
<td>-</td>
<td>5.2</td>
</tr>
</tbody>
</table>

(*) 28.9 MUSD preparedness + 60 MUSD piloting
(**) at the time of the study Gabon did not have R-PP available
Sources: FCPF, FIP, Simula 2010

FIP supports developing countries in their efforts to reduce deforestation and forest degradation and promotes sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks (REDD+). It is under the SCF, one of the two funds under the Climate Investment Funds.

Of the African countries, Burkina Faso, Congo (DRC) and Ghana are included in FIP. Under FIP, each country has an investment programme which describes expected investment volumes and thematic areas for activities. For the African countries, FIP has agreed that the range of funding from FIP resources for Burkina Faso is USD 20-30 million and for DRC USD 40-60 million. USD 50 million has been proposed for Ghana. See the box which outlines the thematic areas on the next page.

Simula (2010) notes that with the establishment of FCPF R-PPs and UNREDD NDPs, it is the first time that comparative information on financing needs is available in many developing countries. The investment in various activities in the different phases of REDD+ also benefits the basic modalities of the forest sector, such as enhanced capacities, policy and legislative frameworks, monitoring systems and sustainable forest management.

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55 Source FIP: https://www.climateinvestmentfunds.org/cif/node/5
FIP thematic areas in Burkina Faso, Congo (DRC) and Ghana

**Burkina Faso** FIP priorities:
- REDD+ strategy development, legal and regulatory framework and forest governance
- Capacity building, stakeholder outreach and consultations
- Investment in sustainable forest and woodland management targeted at achieving transformational change towards landscape approaches
- Knowledge management

Investment projects:
- Decentralized sustainable forest management
- Participatory management of state forests
- Project for forest products utilization and value chains

**DRC** Investment projects:
- Addressing deforestation and degradation
- Small grants programme for promising small-scale REDD+ initiatives
- Engaging the private sector in REDD+ in DRC

**Ghana** proposed investment areas:
- Securing the integrity of natural forests and woodland resources, including research, capacity building, governance, biodiversity conservation and forest management.
- Enhancement of carbon stocks, including rehabilitation of degraded natural forests, plantation development and sustainable wood fuel production
- Climate-smart agriculture and watershed protection, including climate-smart cocoa landscapes and watershed services
Appendix 6

Enabling environment
<table>
<thead>
<tr>
<th>African Country</th>
<th>WB doing business rating</th>
<th>IWC Africa Plantation Index Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>148</td>
<td>-</td>
</tr>
<tr>
<td>Angola</td>
<td>172</td>
<td>5.5</td>
</tr>
<tr>
<td>Benin</td>
<td>175</td>
<td>4.9</td>
</tr>
<tr>
<td>Botswana</td>
<td>54</td>
<td>-</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>150</td>
<td>-</td>
</tr>
<tr>
<td>Burundi</td>
<td>169</td>
<td>-</td>
</tr>
<tr>
<td>Cameroon</td>
<td>161</td>
<td>5.2</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>119</td>
<td>-</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>182</td>
<td>4.5</td>
</tr>
<tr>
<td>Chad</td>
<td>183</td>
<td>-</td>
</tr>
<tr>
<td>Comoros</td>
<td>157</td>
<td>-</td>
</tr>
<tr>
<td>Congo</td>
<td>181</td>
<td>5.5</td>
</tr>
<tr>
<td>DR Congo</td>
<td>178</td>
<td>4.7</td>
</tr>
<tr>
<td>Djibouti</td>
<td>170</td>
<td>-</td>
</tr>
<tr>
<td>Egypt</td>
<td>110</td>
<td>-</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>155</td>
<td>-</td>
</tr>
<tr>
<td>Eritrea</td>
<td>180</td>
<td>-</td>
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<tr>
<td>Ethiopia</td>
<td>111</td>
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<tr>
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</tr>
<tr>
<td>Guinea-Bissau</td>
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<td>-</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>167</td>
<td>5.1</td>
</tr>
<tr>
<td>Kenya</td>
<td>109</td>
<td>5.3</td>
</tr>
<tr>
<td>Lesotho</td>
<td>143</td>
<td>-</td>
</tr>
<tr>
<td>Liberia</td>
<td>151</td>
<td>5.5</td>
</tr>
<tr>
<td>Libya</td>
<td>NA</td>
<td>-</td>
</tr>
<tr>
<td>Madagascar</td>
<td>137</td>
<td>5.8</td>
</tr>
<tr>
<td>Malawi</td>
<td>145</td>
<td>5.4</td>
</tr>
<tr>
<td>Mali</td>
<td>146</td>
<td>-</td>
</tr>
<tr>
<td>Mauritania</td>
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<td>-</td>
</tr>
<tr>
<td>Mauritius</td>
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<td>-</td>
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<tr>
<td>Morocco</td>
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<td>Namibia</td>
<td>78</td>
<td>-</td>
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Regional foreign direct investment trends, 1999-2011 (in billion USD)

Source: UNCTAD

Foreign direct investment inflow in Africa, 1998-2011, current prices

Source: UNCTAD
Appendix 7

Strategies for, lessons about and success stories of increasing financing flows to sustainable forest management
**Example of an investment promotion agency**

The government of Gabon created the Agency for the Promotion of Private Investment (APIP) in 2000. The agency is mandated to:
- Identify investors and technical, financial and commercial partners world-wide;
- Organize events (forums, seminars, etc.) both in Gabon and abroad on the investment and business environment in Gabon;
- Collect economic information and disseminate it to potential operators and investors;
- Welcome, guide and assist investors;
- Streamline bureaucratic formalities for the creation, modification or termination of business activities; and
- Contribute to the production of sectoral studies and the identification of business opportunities.

The Agency has the following departments:
- The Research and Projects Department, which participates in producing timber sector studies for identifying investment opportunities and manages a portfolio of projects aimed at finding partners and/or funding;
- The Marketing Department, which disseminates all relevant documentation and economic information on Gabon;
- The IT Department, which is responsible for documentation and which makes it possible for economic agents to search for or exchange documents concerning their respective business sectors and to access the databases of APIP and its partners.

Source: Nguema, 2007
Typical incentives in the forest sector and examples from Latin America and Tunisia

**Typical forest investment incentives**

According to FAO (2004), enabling incentives in the context of plantation investments include the following thematic areas:

- Land tenure and resource security
- Accessibility and availability of basic infrastructure (ports, roads, electricity etc.)
- Producer support services
- Market development
- Credit facilities
- Political and macroeconomic stability
- National security
- Research and development
- Extension

**Direct and indirect incentives**

- Goods and materials (e.g. fertilizers, seedlings, etc.)
- Specific provision of local infrastructure
- Tax relief or concession periods
- Differential fees and access to resources
- Subsidized loans
- Cost-sharing arrangements and price guarantees
- Subsidized input or output prices
- Trade restrictions (e.g. tariffs)
- Regulated exchange rates
- Interest rates

Latin American countries with significant plantation interests have used, or continue to use, incentives and subsidies as a means of encouraging plantation development. For example, between 1974 and 1994, the Chilean Government spent some USD 50 million on afforestation grants. In Brazil, subsidies and taxation incentives were used to encourage the establishment of plantations, and in recent years, Ecuador and Colombia have adopted a similar incentive model to that used in Chile. Ecuador currently provides planting and maintenance incentives amounting to USD 300 per ha. Paraguay provides USD 350 per ha for planting and USD 100 per ha for maintenance for the first three years.

**Tunisia**

According to Daly-Hassen (2012) Tunisia has an Investment Incentive Code. According to this Code, subsidy premiums are given for plantations of forest and pastoral tree species in privately owned lands. Premiums vary between 30 and 50 per cent. The higher percentage is applied if the total cost of investment exceeds USD 150,000.