

**UNFF – UNITED NATIONS FORUM ON FORESTS**  
**THE UNITED NATIONS**

***BRIEF STUDY ON FUNDING AND FINANCE FOR  
FORESTRY AND FOREST-BASED SECTOR***

**- FINAL REPORT -**

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## LIST OF ACRONYMS

%	Percentage
€	Europe Euro
ADB	Asian Development Bank
AfDB	African Development Bank
BB Florestal	Forest Loan of Bank of Brazil
CBO	Community Based Organisation
CPF	Collaborative Partnership on Forests
CTF	Conservation Trust Fund
DDI	Domestic Direct Investment
DI	Direct Investment
EBRD	European Bank for Reconstruction and Development
ECA	Export Credit Agencies
ETFRN	European Tropical Forest Research Network
EU	European Union
EuropeAid	European Agency for International Development
FAO	Food and Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment
FONAFIFO	<i>Fondo Nacional de Financiamiento Forestal</i> (National Fund for Forestry Finance – Costa Rica)
GEF	Global Environment Facility
GFF	Global Forest Fund
HCVF	High Conservation Value Forest
IADB	Inter-American Development Bank
IAF	International Arrangement on Forests
IAIF	Forest Investment Attractiveness Index
IBRD	International Bank for Reconstruction and Development
ICSID	International Centre for Settlement of Investment Disputes



TDR	Tradable Development Rights
TIMO	Timber Investment Management Organisation
TNC	The Nature Conservancy
UK	United Kingdom
UN	The United Nations
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
USAID	United States Agency for International Development
US\$	United States Dollar
WB	The World Bank
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute
WTO	World Trade Organisation
WWF	World Wildlife Fund



# **1 – INTRODUCTION**

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## **1.1 – Background**

Finance/funding of Sustainable Forest Management (SFM) and of the International Arrangement on Forests (IAF) appears prominently among the issues that countries have been debating in the UNFF, and having up-to-date information of the present situation of the major flows of financial resources directed to the forest and forest-based sector worldwide is of extreme importance in facilitating the work of the Forum.

Recent and updated data on forestry finance/funding is lacking. The majority of past reviews on the issue are already outdated, and there is no new recent survey or compilation of data that can provide the latest developments (from 2001/2002 onwards) on the issue. A brief, precise and objective review of the main funding/finance resource flows will perfectly fill in this blank.

The United Nations Conference on Environment and Development (UNCED), meeting in Rio de Janeiro in 1992, adopted Agenda 21 and the Forest Principles, which called for “new and additional” financing for developing countries for their efforts and activities related to sustainable development. As a follow-up to the United Nations Conference on Environment and Development, an intergovernmental and participatory policy process was initiated through the ad hoc Intergovernmental Panel on Forests (IPF), 1995-1997, and the ad hoc Intergovernmental Forum on Forests (IFF), 1997-2000. At the recommendation of IFF, the Economic and Social Council established the United Nations Forum on Forests in 2000. (UNFF, 2003)

IPF and IFF strongly emphasised financing. The final reports of IPF and IFF conveyed the message that current financial resources were insufficient for combating deforestation and promoting sustainable forest management. IPF/IFF concluded that while domestic financing should be the main source, external financing, in particular ODA, was vital for developing countries. IPF/IFF also raised the issue of growing but unevenly distributed private financing and called for proper valuation of forest resources and development of markets for forest goods and (UNFF, 2003). With the creation of UNFF the issue of finance continued to be an important theme



## **2 – EXECUTIVE SUMMARY**

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This report presents the findings of a brief study on the main types of funding and investments flows worldwide, with special focus in the forestry and forest-based sector. The study aims at fulfilling the needs for update information about the theme to help support discussions within the UNFF and in this way contribute to the review of the effectiveness of the International Arrangement on Forests (IAF), which includes finance/funding of Sustainable Forest Management (SFM).

This study, commissioned by the UNFF Secretariat to the author, is in line with the UNFF discussion covering the means of implementation (finance) of its programme of work, and with the requirement that the question of finance should be addressed at each session of the UNFF.

### **2.1 – Recent Surveys and Knowledge on the Issue**

The difficulties involving data collection, compilation and analysis of information on forest funding and investments worldwide are widely recognised. The existing surveys of major financing and funding resource flows directed to the forest and the forest-based sector worldwide are in most of the case outdated, with a few concise and informative reviews published after 2002. Estimating the investments in the forest sector is a difficult task as up-to-date information on the issue is scarce or not available.

The most relevant information can be collected from international bodies (UN organisations such as the UNCTAD, the World Bank, regional development banks, and others), international agencies (multilateral and bilateral donor agencies, ITTO, FAO, GEF, others), national government/public agencies of some countries, and the private sector (domestic and foreign). However, the information available is in most of

Source of funding	Beneficiary/recipient		
	Public sector	Private sector	
		Commercial	Noncommercial
<b>Domestic</b>	<ul style="list-style-type: none"> <li>Ø Government Departments</li> <li>Ø Government Agencies (National And Decentralised, E.G., Forest Corporations)</li> <li>Ø Research Institutions (Sectorial, E.G., Forestry Institutes And General, E.G., Universities)</li> </ul>	<ul style="list-style-type: none"> <li>Ø Forest Companies</li> <li>Ø Sectorial Investors</li> <li>Ø TIMO</li> <li>Ø General Direct Investors</li> <li>Ø Large-Scale Landowners</li> </ul>	<ul style="list-style-type: none"> <li>Ø Subsistence farmers</li> <li>Ø Rural communities (including indigenous communities)</li> <li>Ø CBOs or looser affiliate community networks</li> <li>Ø NGOs (mostly implicit investments, in kind)</li> </ul>
<b>Foreign</b>	<ul style="list-style-type: none"> <li>Ø Bilateral Donors</li> <li>Ø Multilateral Donors (Including Funding Institutions Of International Conventions)</li> <li>Ø Research Institutions (Sectorial And General)</li> </ul>	<ul style="list-style-type: none"> <li>Ø International Forestry Companies</li> <li>Ø Sectorial Investors</li> <li>Ø Specialist Direct Investors (E.G., Revolving Environmental Funds)</li> <li>Ø General Direct Investors (e.g., TNCs)</li> <li>Ø Institutional Equity Investors (e.g., Banks, Pension Funds, Insurance Companies)</li> </ul>	<ul style="list-style-type: none"> <li>Ø Foundations</li> <li>Ø Specialist concessionaire funds (e.g., sinking environmental funds)</li> <li>Ø Philanthropists, benefactors</li> <li>Ø International NGOs</li> </ul>

Source: Chandrasekharan 1996a & 1996b, Joshi 1997, UNDP 1997; cited by Costa et al (1999), adapted by the author.

## 2.2 – State of Funding/Financial Flows to the Forest Sector

(i) *EstimO.(#)-Ø:øØa t*

- *Global Private Investments*: Traditionally, global DI are concentrated in developed countries, mainly in the USA, European Union and Japan, and this partly explains the traditional supremacy of DDI. Recently, developing countries have taken a more prominent position, mainly a result of growing investments in emerging countries such as China/Hong Kong, Mexico, Brazil, and Eastern European countries such as Poland. Increase in the participation of developing countries in total DI over the 1995-2004 period: from 24% in 1995 to 27% in 2004.
  - ∅ *DDI*: Domestic direct investments have the strongest contribution to DI, with a participation of over 90% in average along the last decade. Between 1996-2005, the participation of DDI in DI was the lowest (79.1%) in 1999, but after that period the DDI share increased and is now levelled again over 90%.
  - ∅ *FDI*: Foreign direct investments have a relatively small participation in the total worldwide DI. In the last decade, FDI have participated, in average, with less than 10% of the total global DI. From the mid.3(B1199)-5.80s upal DI. 2000, the FDI participation in worldwideI grew to 21%, as a re of globalisation and.3(B11o)-4.8(pportu)-4.8(ni)6.9(ties fo booming growth in FDI was not sustained after 2000. Historically global FDI have been concentrated in the developed countries. UNCTAD data (2005) points out that the main developing countries that benefited from FDI between 2002-2004 were China, Hong Kong (mostly in 2004), Brazil, Mexico, and Singapore. On the other hand, the main investors were developed countries, including USA, United Kingdom, France, Canada and the Netherlands
- *Private Investments in the Forest Sector*: The forest sector worldwide has passed

sector in a global scale exceeds US\$ 60 billion a year, which represents about 1% of total DI in the world. In the forest sector, following the general trend, DDI share is predominant.

- ∅ According to UNCTAD data, the worldwide FDI in the agriculture, forestry, hunting and fishing activities combined reached US\$ 1.8 billion in 2001-03, representing around 3.5% of the total FDI worldwide in the primary sector. The worldwide entrance of FDI in the forest industry (wood and wood products manufacturing) reached US\$ 2.3 billion in 2001-03, which represented 4.5% of the FDI in the secondary sector and only 1.4% (2001-2003) of the total global FDI (primary, secondary and tertiary sectors).

*(iii) Global and Domestic Public Investments (ODA and others)*

- *ODA – Official Development Assistance.* ODA involve bilateral and multilateral donor agencies (WB, OECD), multilateral regional development banks (IADB, AFDB, ADB), UN organisations, among others.
- ∅ Estimating ODA trends in the forestry sector is a problem as consistent information is not readily available. Recent data from the Organisation for Economic Cooperation and Development (OECD) shows that ODA to the forestry sector represented 0.6% of total ODA in 2001-03.



countries. Those countries receive most of the private financing, while low-income countries are largely dependent on ODA;

- iv. Forest financing towards forest protection and preservation and community forests has been provided primarily by bilateral and multilateral donor agencies;
- v. Considering economic profit and lack of proper incentives, under given circumstances, the response of investing on SFM has been worse than investing in other land uses;
- vi. Some trends in development financing suggest that SFM faces a change on financial environment but, unfortunately, nothing indicates that official flows would reach the required levels in the short or medium-run;
- vii. The climate for investment in a country represented by a stable economy, institutional and policy environment as well as specific intra and inter sectorial factors, are a requirement to attract investments;
- viii. Financing strategies should concentrate on improving revenue collection, leveraging private investments and creating stable policy and institutional environments, including secure ownership rights and coherent forest policies towards SFM;
- ix. Innovative mechanisms may not be efficient if property rights are not secure. Without economic reforms, efforts leveraging FDI may not provide the expected results.

Based on the extensive review carried out by the consultant the major perspectives on forest funding and investments are the following:

- i. Total investments in the forest sector are expected to continue at the same level as observed in the recent past;
- ii. DI in the forest sector will most probably maintain the current levels of investments;
- iii. The importance of conservation easements is growing, mostly as a result of the new approach adopted by TIMO in USA when dealing with forestlands as a separate asset;
- iv. M&A in the forest industry will likely continue in the future, but at a slower pace than in the past, given the changes in the worldwide economy and competition regulations.

## **2.4 – Critical Analysis of Forest Sector Funding/Investments**

The review carried out clearly points out that DI, particularly DDI, is by far the most relevant source of funding and finance for forestry and forest-based sector. Over the years DI have generally contributed with more than 90% of the total value invested, amounting to around US\$60 billion per year.

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*Brief Study on Funding and Finance for Forestry and Forest-Based Sector*

- Estimates of the financial needs for forestry and SFM worldwide point out to between US\$ 33 billion and near US\$ 70 billion, depending on whether environmental externalities (e.g., compensation for deforestation and forest degradation) are included or not.
  
- **Investments in Forestry and Forest-Based Sector**
  - The most important type of investment in forestry and in the forest-based sector is Direct Investment (DI). Under this category Domestic





## **3 – MAJOR FUNDING/INVESTMENTS FLOWS TO THE FORESTRY SECTOR**

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### **3.1 – Initial Considerations**

This chapter presents information on the main types of funding and investment flows with special focus in the forestry and forest-based sector worldwide. The aim is to support UNFF discussion covering the issue of finance and funding of SFM as one of the common items to be addressed by the Forum and as one of the means of implementation of the plan of action and programme of work also defined by the Forum.

Precise and update information and data are of extreme importance for decision-making, policy implementation, and monitoring of any programme. Without accurate and reliable investment data, policy makers are hindered in the formulation of appropriate investment policies. This is particularly true in developing countries and in the least developed countries where data collection is a major challenge. The lack of such information can highly jeopardise the process.

### **3.2 – Recent Surveys and Knowledge on the Issue**

The difficulties involving data collection, compilation and analysis of information on forest funding and investments worldwide are widely recognissee(.5EJor7536 0 TDj.3112 0p-5(iam)7.3(dat)ly)-11

investments, loans, grants, others), sources (domestic/foreign) and institutions (public/private). These categories tend to be mixed with each other through various combinations and joint financing arrangements (see table 02).

**Table 02 - Funding and Financing Institutions to the Forest Sector**

Source of funding	Beneficiary/recipient		
	Public sector	Private sector	
		Commercial	Noncommercial
<b>Domestic</b>	<ul style="list-style-type: none"> <li>Ø government departments</li> <li>Ø government agencies (national and decentralised, e.g., forest corporations)</li> <li>Ø research institutions (sectorial, e.g., forestry institutes and general, e.g., universities)</li> </ul>	<ul style="list-style-type: none"> <li>Ø forest companies</li> <li>Ø sectorial investors</li> <li>Ø general direct investors</li> <li>Ø large-scale landowners</li> </ul>	<ul style="list-style-type: none"> <li>Ø subsistence farmers</li> <li>Ø rural communities (including indigenous communities)</li> <li>Ø CBOs or looser affiliate community networks</li> <li>Ø NGOs (mostly implicit investments, in kind)</li> </ul>
<b>Foreign</b>	<ul style="list-style-type: none"> <li>Ø bilateral donors</li> <li>Ø multilateral donors (including funding institutions of international conventions)</li> <li>Ø research institutions</li> </ul>		

As for the **sources of private funding**, they can be direct investments (foreign and domestic) from private institutions and companies, among others. The sources can include credit for exports, access to particular credits in the external market, TIMO (Timber Investment

required, as identified by the Expert Panel,



UNCTAD is the major source of information for global statistics on direct investments (DI) both for domestic direct investments (DDI) and foreign direct investments (FDI). Most of the information presented in this section is based on UNCTAD database and on previous reviews on the issue from studies carried out by the IADB.

Since the late 1980's, the world has experienced a strong expansion of the DI flows particularly of foreign direct investments (FDI) as result mainly of the globalisation process, associated to the financial markets liberalisation. (IADB, 2004) Globalisation is changing the nature of manufacturing worldwide. The cumulative effect of numerous factors, including the development of global communication networks, the extension of transportation networks, universal availability of the latest and best technologies worldwide, and the lowering of barriers to international competition through the World Trade Organisation – WTO have promoted globalisation and corroborated to increase DI. (Bowyer, 2004)

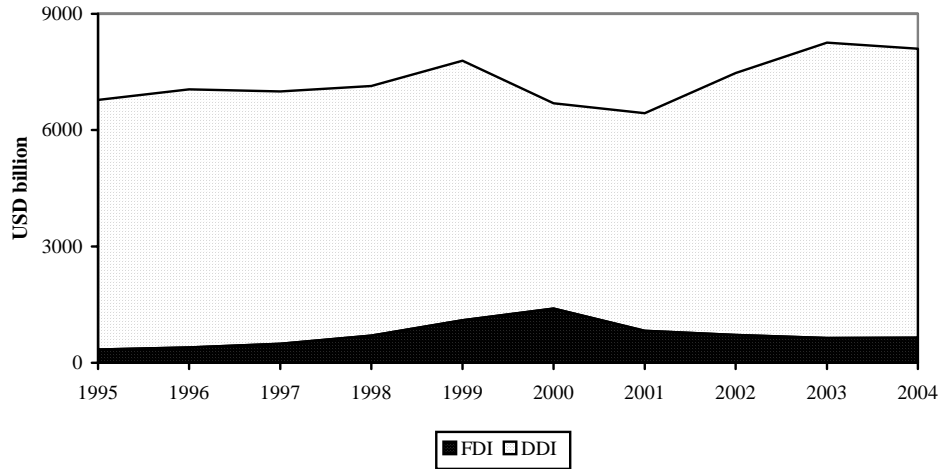
In the second half of the 1990's, the DI flows did intensified even more, due to different driving forces such as:

- (i) Continuous liberalisation of FDI;
- (ii) Extension of bilateral and multilateral commercial treaty;
- (iii) Intensification of privatisation processes;
- (iv) Trends of fusions and trans-frontier acquisitions (M&A), mainly in the USA, EU and Japan; and
- (v) Outstanding performance of the American economy that served as a motor to the other worldwide economies. (IADB, 2004)

Such dynamics of events was important for the record DI that reached almost US\$ 8,000 billion in 1999 and US\$ 8,200 billion in 2003. The 1999 record was affected by a number of events in the subsequent years, including the terrorist attacks in USA, and the flows of DI dropped in 2001. This was followed by a new recovery in the subsequent years as shown in figure 01 (UNCTAD, 2005). It also can be noticed that FDI declined in value and share, and DDI became even more important in the last few years.

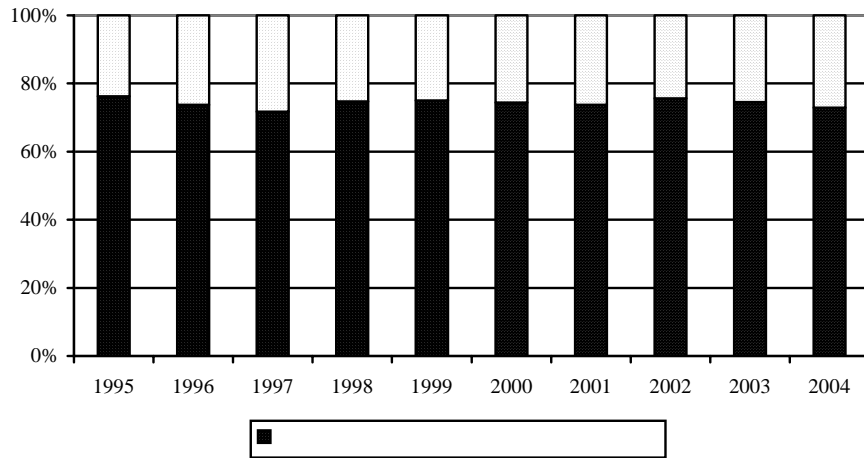
Traditionally, DI are concentrated in developed countries, mainly in the USA, European Union and Japan, and this partly explains the traditional supremacy of DDI. Recently, developing countries have taken a more prominent position, mainly a result of investments in emerging countries such as China/Hong Kong, Mexico, Brazil, and Poland. Figure 02 shows a slight increase in the participation of the DI in developing countries over the 1995-2004 period: from 24% in 1995 to 27% in 2004 (UNCTAD, 2005).

**Figure 01 – Worldwide Evolution of DI (1995 – 2004)**



Source: UNCTAD – World Investment Report (2005), adapted by the author

**Figure 02 – Worldwide Evolution of the DI Distribution (1995 – 2004)**

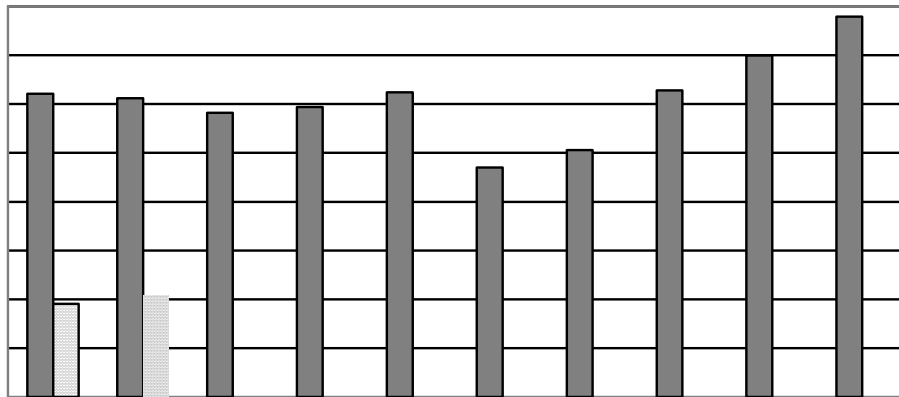




Information on the amount of DDI along the last years, separately by developed and developing countries is presented in figure 05. DDI between 1995 and 1999 worldwide was relatively stable, not exceeding US\$ 7,000 billion.

In 2000 a slight decrease in the DDI worldwide was observed, basically a result of reduction in DDI in both the developed and developing countries. After that, DDI increased and reached in 2004 a figure around US\$ 8,400 billion, being US\$ 6,200 in developed countries and US\$ 2,200 in developing countries. This represents a total increase in value of 62% over the lowest level, achieved in 2000.

**Figure 05 – Worldwide Evolution of DDI by Group of Countries (1995 – 2004)**







**Table 03 - Net Inward Foreign Direct Investment in Developing Countries in 2003 and 2004**

<i>Region</i>	<b>Total FDI (US\$ billions)</b>		<b>% Change</b>
	<b>2003</b>	<b>2004</b>	
East Asia and Pacific	59.6	63.6	6.7%
Europe and Central Asia	35.6	37.6	5.6%
Latin America and the Caribbean	36.5	42.4	16.2%
Middle East and North Africa	4.8	4.1	-14.6%
South Asia	5.2	6.5	25.0%

process forestlands emerged as a new class of market assets for investors, in opposition to what had been previously observed, when forestlands belonged to the forest industry, governments or small landowners.

Despite the relative importance of DI in the forest sector worldwide, the available data on such investments are limited. As previously mentioned, studies of the World Bank (IMF, 2003) have made reference to the growing role of the private sector in the forest sector. The total amount



iii. **Intra Sectorial** - Internal factors of the forest sector that directly affect most of the sector's businesses climate such as forest policies, transaction costs associated to forest production and others.

*- FDI in Forests (SFM)*

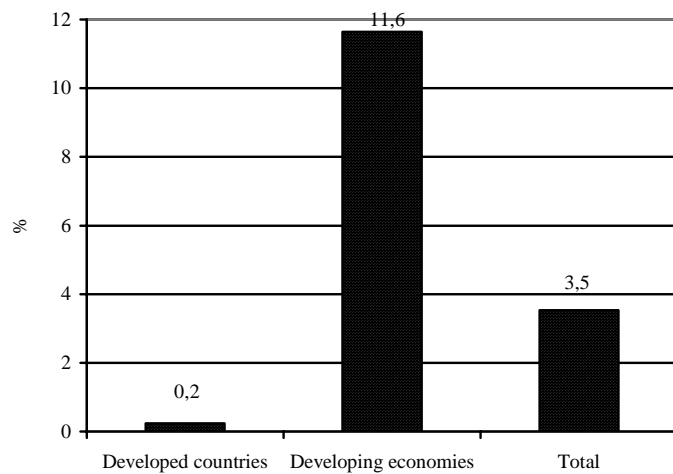
According to UNCTAD data, the worldwide FDI in the agriculture, forestry, hunting and fishing activities combined reached US\$ 1.8 billion in 2001-03, representing around 3.5% of the total FDI worldwide in the primary sector. Most of the FDI in those activities are concentrated in the developing countries (see figure 09). There is no separated/disaggregated information for the forest sector, in any case it is estimated that most probably FDI in upstream forestry and SFM does not surpass 50% of the above value, meaning that it would be quite less than US\$ 1 billion per year.

In the past few years, forestlands and especially forest plantations have been the main target for FDI. Within such context, it is important to consider the role of TIMO (Timberland Investment Management Organisations), which have been outstanding as DI, both as DDI or FDI.

There is still the fact that part of FDI in timberlands is most probably not captured by UNCTAD and other organisation compiling information on the subject. This is due to the fact that some transactions, particular involving forest acquisitions in developing countries are financially structured in such a way that cannot be in fact categorized as DI.

Forest assets usually have value added lower than in the forest industry. As previously mentioned FDI in forest assets have been mostly directed towards developing countries. In this case, some Asian and Latin American countries have been a target of the FDI. In InteatthathaatoAthpt edish-F.9(54.4(s)5.3

**Figure 09 – Worldwide Participation of Forestry, Agriculture, Hunting and Fishing Activities in Total FDI in the Primary Sector (2001 – 2003)**

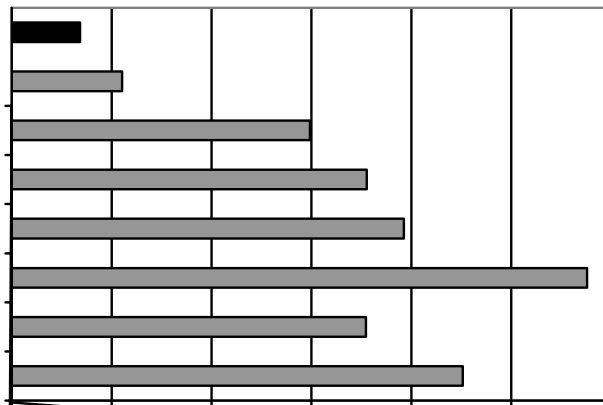


The FDI in the forest industry also have been influenced by the strong process of privatisation of state forests (native and planted) that happened particularly along the 1990s in some countries, such as New Zealand and South Africa (IADB, 2004).

Figure 11 compares the relative importance of the FDI in the forest industry with other industries for the period 2001-2003. Forest industry is the eighth major industrial activity as for FDI in the world.

The forest industry, particularly the pulp and paper is a capital-intensive industry. As a result, larger FDI in the forest sector are, almost always, tied to the pulp and paper industry investments. The consultant estimates that investments tied to this industry represent about 70% of the FDI in the forest sector in a global scale (IADB, 2004).

**Figure 11 – Worldwide FDI in the Most Relevant Industrial Segments (2001 – 2003)**

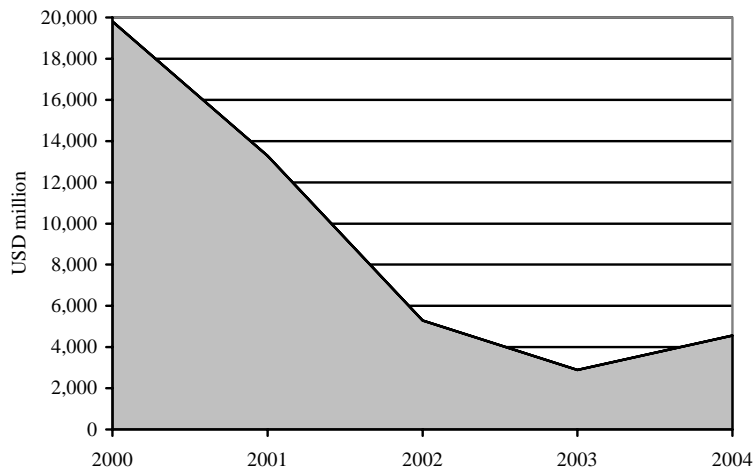






Such amount has strongly been influenced by major M&A happened in that year. It is worth mentioning the acquisition of the American Consolidated Inc. Papers by the Finn Stora Enso Oy (US\$ 4.9 billion), as well as the acquisition of the New Zealander Fletcher Paper Co by the Norwegian Norske Skog ASA (US\$ 2.5 billion), among others. However the M&A of forest industries (forest-based sector) have decreased in the past several years reaching estimated US\$ 4.5 billion in 2004. (IADB, 2004)

**Figure 12 – Worldwide Evolution of Mergers and Acquisitions in the Forest-Based Sector (2000 – 2004)**



Source: UNCTAD – World Investment Report (2005), adapted by the author

The FDI and M&A by global private institutions depend on attractiveness of the business and on the climate for investments in the country under consideration. Thus investment promotion organisations are now more actively involved in improving investment climate in the forest sector, and this in many cases increases their role in national forest-related policies.

different institutions. As example, institutions involved with ODA flows include the works and actions of the World Bank, the GEF and regional development banks (e.g., IADB, AfDB, ADB), organisations of the United Nations, multilateral grant aid institutions, among other institutions. The way these institutions provide funding vary but in general it can be through grants and loans, in the form of debts, or through technical assistance.

According to FAO, developed countries have committed only a small part of their GNI (gross national income) as ODA. With the average ODA/GNI ratio at only 0.22% for members of the Organisation for Economic Co-operation and Development (OECD), the target of 0.7% is still a distant goal. Furthermore, the promised commitments of the UNCED have largely failed to materialise and while levels of ODA rose from 1990 to 1998, levels are generally low compared to UN targets.

Estimating ODA trends in the forestry sector is a problem as consistent information is not readily available. A 1999 analysis by the Program on Forests (PROFOR) estimates that from 1986 to 1997, ODA bilateral and multilateral resources in the forestry sector rose from US\$784 million in 1986 to US\$1,270 million in 1997.

Recent data from the Organisation for Economic Cooperation and Development (OECD) on the total ODA/OA commitments to forestry, by donor (OECD and multilateral agencies) and recipients is shown respectively in tables 04 and 05 for the 1996-2004 period. The annual average commitment to forestry category (as defined by OECD) was US\$ 564 million over the period. On average such amount (committed to forestry) is less than 1% of total commitments of donors to all sectors and programs, i.e., 1% of all aid, of overall development assistance.

***Table 04 –ODA/OA Commitments to Forestry by Donor and Year (1996-2004)***

Donors	Total Commitment (US\$ million)									Average 1996-2004
	1996	1997	1998	1999	2000	2001	2002	2003	2004	





Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA) and International Centre for Settlement of Investment Disputes (ICSID).

- IBRD – The International Bank for Reconstruction and Development has a supportive role in the World Bank’s mission towards poverty reduction and improvement of living standards. The IBRD focuses on middle income and creditworthy poor countries, helping customers to get access to the capital and tools of management of financial risk, with more favourable conditions, longer periods of expiration and in a more sustainable way than other sources. In contrast to commercial banks, the IBRD is stimulated by the impact on development and not on profit maximisation. Its total annual budget (financing/investment) to loans has reached US\$ 13.6 billions in 2005. The institution has directly been a player on the funding for forest activities in a number of countries. Out of the IBRD loans for all sectors in 2005 (US\$ 22.3 billion), the amount allocated to the category **forest, agriculture and fishing** reached **US\$ 1.5 billion** (9%).
  
- IDA - The International Development Association is also the part of the World Bank. IDA funds help poor countries to deal with the complex challenges they face in striving to meet the Millennium Development Goals. In 2005, the total IDA commitment for all economic sectors reached US\$ 8.7 billion, with 5% been allocated for **forest, agriculture and fishing (US\$ 435 million)**
  
- IFC – The International Finance Corporation is a member of the World Bank Group and is headquartered in Washington, DC. It shares the primary objective of all World Bank Group institutions: to improve the quality of the lives of people in its developing member countries, also promotes sustainable private sector investment in developing countries. The IFC has been doing business in the forest sector since the late 1960s, over which period it has

as nationals of other member countries. Its total annual budget (financing/investment) does not inform financing/investment per economic sectors (including the forest sector).

In addition, the World Bank houses the Program on Forests (PROFOR), a multi-donor trust fund program within the Environmentally and Socially Sustainable Development (ESSD) Forests Team. The sources of funding for PROFOR are from the Department for International Development (DFID) of the United Kingdom, the Finnish Department for International Development Cooperation, the Japanese International Forestry Cooperation Office, Swiss Development Cooperation (SDC). The German Government is an in-kind contributor. Moreover, the WB has the so-called “Forest Strategy and Operational Policy”, which set a proactive course for WB’s engagement in the forest sector.

The WB's loans and credits approved a total of 129 projects worldwide under the category of ‘forest’, amounting to almost US\$ 6 billion for the period 1996-2005 (see table 06). This





The distribution of the GEF' loans in forest projects allocated across the world for the period 1996-2005 is presented in figure 14. Africa and Asia accounted for almost 67% of the total GEF's grants for forest projects. Asia accounts for the majority of the projects (43%) followed by Africa (24%), and Latin America and Caribbean (19%) and Europe and Central Asia (13%). A total of 1% was classified as global projects.

**Table 07 – Worldwide GEF's Loans and Credits to Projects in Forest <sup>(1)</sup> per Year**

Region	Total Amount (US\$ Million)										Total 1996-2005
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Africa	-	-	0.74	0.75	6.30	0.00	12.37	0.98	10.27	10.50	41.90
Asia	-	-	12.20	23.61	6.86	16.35	1.78	1.35	11.66	1.00	74.80
Latin America and Caribbean	-	-	-	9.59	7.73	7.03	-	0.81	-	8.03	33.20
Europe and Central Asia	-	-	-	-	-	-	0.75	-	8.29	14.14	23.17
Global	-	-	-	-	-	-	-	-	-	0.99	0.99
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>12.94</b>	<b>33.95</b>	<b>20.89</b>	<b>23.38</b>	<b>14.90</b>	<b>3.14</b>	<b>30.21</b>	<b>34.66</b>	<b>174.06</b>

<sup>(1)</sup> 'Forest' category as defined by GEF

Source: GEF – Projects Database, adapted by the author.

**Figure 14 – Worldwide GEF's Loans Distribution to Forest Projects by Region (1996-2005)**



323 Technical Assistance grant projects (amounting to US\$ 197 million) approved in 2004, agriculture and natural resources represented 18% (US\$ 27.2 million).

- *KfW Bankengruppe (Germany)*

KfW banking group provides support to the economy, society and ecology in Germany, Europe and worldwide. The bank's projects are about home finance or house modernisation, protection of the environment and the climate, Export and Project Finance or promotion of the developing and transition countries.

Besides, the bank is one of the ten biggest banks in Germany. In 2004, the KfW group raised long-term funds in the equivalent of €52.1 billion in the capital market. From 1997 through 1999 commitments to partner countries totalled € 4.8 billion including € 1.3 billion for environmental and resource protection. No information is available on the amount allocated specifically to forest.

As KfW finances exports (acting as an export-facilitating organisation), and this is a strong component, as in the case of IFC a substantial part of the loans are in fact DI, including both FDI and DDI.

- *United Nations (UN) Organisations*

Organisations of the UN are part of the global public institutions that are involved with funding and finance of forest activities and SFM. Below is a brief description and actions developed by UNEP and FAO, two of the organisations under the mandate of the UN.

- FAO - The role of international organisations such as the FAO has become one of providing information, providing a neutral forum for discussion, and establishing norms, codes, and definitions. FAO can act as a focal point for interaction with national governments, and

### **3.3.3.2- Domestic Public/ Agencies Investing in the Forest Sector**

Financing and investments by domestic public institutions vary across countries depending on a number of factors including government policies and funding/budgeting capacity, objectives and priorities, type of forest activities (e.g., production, protection, others), among others.

Over the past several years, led by FAO, a large number of developing countries in different continents have defined, or is about to define and implement, their forest policies and forest development strategies through the **National Forest Programmes** (NFP). The NFP designates the wide range of approaches to the process of planning, programming and implementation of forest activities in a country to be applied at national and sub-national levels, based on a common set of guiding principles.

Since mid-2002 FAO has hosted the National Forest Programme Facility. The Facility is a funding mechanism and an information initiative that recognizes the essential role NFPs in addressing forest sector issues.. The Facility is a partnership between developing countries, donors, FAO and other international organisations to stimulate the participation of stakeholders in NFP processes through knowledge sharing and capacity building. Hosted by FAO, the Facility operates through a multidonor trust fund under the authority of a committee. It provides direct support to countries and information services worldwide. The NFP has provided a global framework to address forestry issues within the context of sustainable development (FAO, 2005).

The funding for those programs comes from both domestic and foreign sources. Domestic sources include the **National Forest Funds** that are mechanisms designed to ensure that some portion of national revenues is set aside for fo

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Information and statistics on investments by domestic public institutions are not readily available as the sources are spread across countries and organisations, and the data is scarce or have not been compiled. In any case there is a clear indication that, for most of the countries, investments of domestic public institutions are concentrated in forest protection and conservation of natural resources.

In some countries, mostly in the past, governments have developed different financing mechanisms for forestry, including fiscal incentives and subsidies to support the forest industry development. Typical examples are tax incentives developed to expand forest plantations in Brazil, Chile and Uruguay. Other examples of domestic public investments are direct investments made by governments in forest plantations (such as in New Zealand and South Africa).

Some of these incentives and subsidies are still in place. Uruguay and Argentina are example of countries with fiscal incentive schemes in operation for forest plantations. In the developed world there are also example of domestic public mechanisms in place. For instance indirect benefits to support small forest owners and forest management through technical assistance, soft loans or other alternatives are available in Finland, Germany and in a number of other developed countries.

### **3.3.4- Other Financing Sources**

FAO has prepared a document on sources for financing SFM. The list of organisations and options is quite extensive and includes international cooperation, natio-1s(e)7.4(1h666 -1.15cooperatiO

funding around 2,000 conservation projects. The World Wildlife Fund has invested over US\$ 1.2 billion in more than 11,000 projects in 130 countries. All these play a part in the campaign to stop the accelerating degradation of Earth's natural environment, and to help its human inhabitants live in greater harmony with nature. WWF actions are concentrated in conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the redu

become increasingly important as world producers and attracted significant investments (FDI and DDI) to their forest plantation based sectors;

- Existing large-scale and underdeveloped forest resources and increasing timber costs , mostly in Europe makes Russia a country with good opportunity for investments in forestry (PROFOR, 2004). So far, investments in those regions have been mainly driven towards the forest industry that is based on timber from natural forests;
- **FDI** has been rapidly increasing in developing countries, but is **concentrated only in a few countries**. Those countries receive most of the private financing, while low-income countries are largely dependent on ODA (UNFF, 2003). Such a situation is not expected to change significantly in the near future;
- Forest financing towards **forest protection and preservation** and community forests has come primarily from bilateral and multilateral donor agencies and is likely to remain so. Under the most optimistic perspective, investments will remain at the current level. Such agencies, as well as NGOs and private foundations, have been the major sources of investments on forest protection and preservation through grants, donations, funds, projects, and others mechanisms. Only a few donors are willing or have the possibility to increase investment;
- A gap of US\$ 27-30 billion in financing needs for the management and expansion of the existing protected forest areas has been estimated. The current global trends, however, indicate that domestic public expenditure and international financing for this area is flat or declining, although there has been a possible marginal increase in private sector investment.
- As a result, agencies and systems associated to **protected areas** are likely to continue suffering from limited budgets, lack of investment in building or maintaining infrastructure, limited resources for training and capacity building, and competition from other agencies for funds; (Molnar, Scherr and Khare; 2004). Major trends on this area are:
  - ∅ There is an overall low public spending on protected areas in developing countries, mostly due to lack or scarcity of financial resources. The difference between the developed and developing world in this respect is huge. Developed countries spend between 80 to 100 times more than developing countries, if expenditure per hectare of protected area is taken into account;
  - ∅ Trends in ODA funding to protected areas are stagnant. However, ODA has been a major source of finance for forest conservation. According to PROFOR, the multi-donor policy support program, ODA funds have even shown a declining trend;
  - ∅ There is a limited scope for expansion of private finance and investment in protected public areas, specially in developing countries;
  - ∅ Community's area already are, and could potentially be, the most important source of financing for conservation. Communities need special attention and



resulting in more deforestation and forest degradation and tying up scarce financial resources. (UNFF, 2003)

### **3.4.2- Funding/ Investments Perspectives**

Based on the extensive review carried out by the consultant the major perspectives on forest funding and investments are identified and described as it follows:

- **The total investments in the forest sector** are expected to continue at the same level observed in the recent past. DI (private sector - DDI and FDI) will continue to be responsible for the largest share (about 90%), and ODA will likely have its importance gradually reduced. Innovative financing approaches may become a focus of investments and contribute to fill in the gap left by the reduction on ODA SFM funding;
- **DI in the forest sector** will likely maintain its current level of investment, but will probably

in countries with low cost of wooden raw-material and high market potential, as for instance Brazil, China, Russia and some Eastern European countries. The perspective is that FDI prevails from the USA towards Latin America and from Western Europe towards Eastern Europe and Russia. The expectation is that the international trade may grow strongly in the coming years for forest product exports from Eastern European countries, Russia and Brazil.

- **M&A in the forest industry** will likely continue in the future, but at a slower pace than observed in the past, given the changes in the world economy and competition regulations. The latter will be in the short-run a strong barrier for the M&A. As for newsprint, for instance, the top five world producers already account for 85% of the production capacity in Western Europe. In the case of magazine (couche) paper, the top two world producers control 50% of the European market. Within this context, it is important to consider that regulation of the competition certainly will call the attention of European companies for investments outside the region, primarily in Asia and in South America (IADB, 2004).
- The **Global Forest Vision 2050** (PROFOR, 2004) study predicts that by the middle of the XXI century 40% of global forests will be managed primarily for the protection of biodiversity and other forest environmental services. Although such perspective exists the consultant points out that such percentage could be reached only if sufficient funding and financing are allocated for this purpose. This is indeed a challenge for governments and agencies engaged with forest protection, especially when dealing with developing countries. It seems clear that the area for protection of biodiversity and other environmental services will grow faster in developed countries, as finance is easier and existing commercial forests lose their competitiveness.
- Most of the expected growth on **industrial roundwood demand will be in pulp and paper**. While much of the softwood needed for pulp and timber will come from Canada's and Russia's natural forests, increasing volumes of hardwood fibre will come from private-sector-financed plantations in countries of the Southern hemisphere and from China. Such trend creates increasing opportunities for smallholders and local communities to play a significant role in pulpwood supply, and will increase the demand for finance;
- There is a low expectation that proper **incentive mechanisms to invest in SFM**, particularly for natural tropical forests, will be available in the next years. Forests will continue to be less competitive than other land uses as long as externalities are not accounted for. Although by definition SFM should be self-financing the UNFF in its 3rd Session (2003) highlighted that the basic questions in financing remain the same: How can existing financial flows to forestry be channelled to sustainable forestry practices and how can additional investments in SFM be promoted? Since SFM needs to be a profit-seeking activity, the question on how to ensure the profitability and self-financing of SFM will continue to be debated;
- As stated in the **Forest Investment Forum**, forest health in wealthier countries is improving, the demand for forest products and for environmental services from forests is increasing in developing countries, in parallel with increasing demand for agricultural land. Such aspects highlights the need of different types of investments and funding for different countries and activities.

### **3.5 – Critical Factors Affecting Forest Sector Funding/Investments**

The review carried out in this study points out that DI, particularly DDI, is by far the most relevant source of funding and finance for forestry/SFM and forest-based sector. Over the years DI have generally contributed with over 90% of the total investment, amounting to around **US\$ 60 billion per year**.

The trend analysis of this study also pointed out that the relative importance of DI is growing, while ODA is declining. Innovative funding sources are expected to become an option to replace the declining ODA, but there are still several problems to be solved and it will take some time before such alternative becomes significant.





governments to the private sector. In addition, other costs and factors have gained importance in recent years, including the cost of certification (Tomaselli, 2001).

The ad hoc expert group that gave advice on finance before the UNFF4 has also stressed the importance that multilateral and bilateral financial and development institutions working with SFM take prospective actions to reduce financial costs and make disbursements and delivery of ODA more flexible. Different studies have pointed out ways to reduce transaction costs of investing in a region that includes investment promotion programme and undertaking investment facilitation measures.

- **Making Funding and Financing More Effective**

Adjusting the donor's and the recipient's priorities has been point out as a critical factor to make funding and financing more effective for forestry and the forest sector. There is a number of required actions that include the need for 'alignment', making donors of funds to listen more often to recipients, and mutual accountability as investments in some forest projects may be difficult to sustain or produce systemic effects after the donor effort has finished (Manning, 2005);

- **Inadequate Rent Capture**

As discussed in the 3<sup>rd</sup> Session of the UNFF, inadequate rent capture decreases government

- iii. Promoting and influencing private or public investment flows; and
- iv. Property rights approach in which property and utilisation rights are created, clarified, or modified.

According to Costa et al (1999), innovative financing mechanisms tend to fall into one of two categories. The categories are:

- i. Designed, applied and developed for a specific purpose (often to remove a specific investment barrier) related to the financing of environmental projects and enterprises; and
- ii. Conventional financial vehicles used widely in other sectors but that have been adapted and applied to the specialized requirements of SFM or other

A thorough assessment of these mechanisms and their capacity to generate funds and to finance forest projects has not been carried out, and worldwide monetary figures are yet to be assessed.

- **Other Aspects**

A number of additional critical factors need to be taken into account in order to increase funding/investment flows. They include:

- i. Cultural and social factors, primarily for FDI;
- ii. Properly valuing forest resources;
- iii. Eliminating perverse subsidies (such as low stumpage prices due to inefficient rent collection and trade restriction) and disincentives;
- iv. Combating illegal logging;
- v. Eliminating bans and tariffs on legal forest products trade; and

Adverse policies in other sectors; for example providing subsidies to agriculture and reducing the relative profitability of forestry.

## **4 – CONCLUDING REMARKS**

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This study is a review on funding and finance flows for forestry and the forest-based sector worldwide. Its main purpose is to support UNFF in the discussion of the topic.

Based on the information available and on the discussion presented in the previous chapters, the consultant highlights the following aspects:

- **Needs for Investments in Forestry/Forest-Based Sector**

- The difficulties involved with data collection, compilation and analysis of information of forest investments worldwide are widely recognised. Existing surveys of funding and investment flows to the forestry and the forest-based sector worldwide are outdated with a few concise and informative reviews published after 2002;
- There is no agreement on the amount invested in forestry and in the forest-based sector worldwide every year. However, an estimate of the total global investments amounts to around US\$ 64 billion per year from all sources (DI, ODA, and others), with US\$ 18 billion in upstream forests and SFM and about US\$ 46 billion in downstream forest-based industry and trade;
- Estimates of the financial needs for forestry and SFM worldwide points out to between US\$ 33 billion and US\$ 70 billion, depending on whether environmental externalities (e.g., compensation for deforestation and forest degradation) are included.

- **Investments in Forestry and Forest-Based Sector**

- The major type of investment in forestry and in the forest-based sector is Direct Investment (DI). Under this category Domestic Direct Investment (DDI) predominates with over 90% of the total investments. The remaining investments (less than 10%) come from FDI. DI have increased after 2001 as result of the improvement of the internal climate for investments;
- DI concentrates mostly in developed countries and on forest plantations and related downstream industrial processing and trade projects. This has been a result of the nature of investments with focus on economic returns. Out of the total investment, around 30% is estimated to be driven towards SFM (forestry) and the remaining 70% to forest-based industries and trade;



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