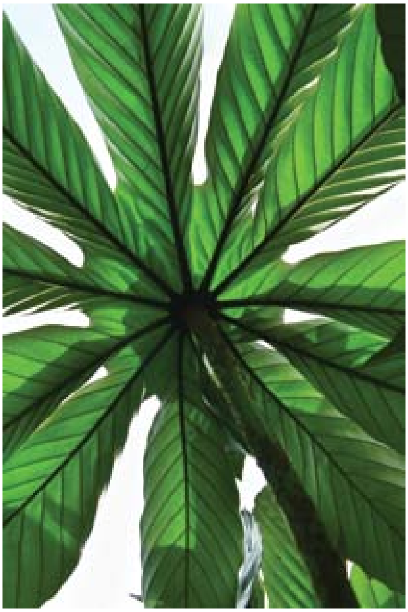
Dutch Financial Institutions and Forestry

Involvement, experience and perspectives

An exploratory study



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Foreword

There is increasing recognition of the importance of the preservation and proper management of forests for economic growth and social development, and for nature and the environment. At the same time, deforestation and land degradation are a major, persistent problem, particularly in the tropics. This results in major risks, damage, and loss of natural capital, for both present and future generations. How to turn the tide – how to transform the process of forest loss into forest recovery and forest preservation – is an issue for which there are no simple solutions, and that involves a large number of different parties.

One of the major challenges is how to create a healthy financial basis for effective forest management, so that it preserves the natural basis but is also a competitive activity, one that is attractive for investment and entrepreneurship. This requires extensive financial resources to be mobilised, both to create the preconditions for a good investment climate and for direct investment in effective forest management. The greater part of that direct investment will need to come from private sources.

The Dutch government is working towards a green economy and sustainable growth. In this framework, it foresees a central role for the private sector, including in the context of international trade relations and development co-operation. The principles of corporate social responsibility and financing form the basis for this. Within the international policy frameworks such as the Convention on Climate Change, the Convention on Biodiversity, the UN Forum on Forests, the Netherlands – often in the context of the EU – aims to create the conditions and tools for responsible private financing and enterprise for sustainable forestry and preservation of biodiversity – together with the investment climate for these – in the countries concerned.

In recent years, various financial institutions – banks, private investors, pension funds, insurance companies – in the Netherlands and elsewhere have already invested in forests and/or shown an interest in exploring the possibilities further. Involvement in forests has up to now been a matter for the more developed, western countries; in recent years, cautious consideration has also been given to the possibilities in the tropical world and emerging economies. Some financial institutions have already built up a considerable portfolio and a network of expertise and contacts in western countries and they are increasingly able to make use of them. Investment in forests in tropical countries is still largely an unknown and unexplored area, where people see opportunities but also numerous risks. To a large extent, the relevant knowledge and expertise are also lacking. The tropical forest world and the financial world do not yet find it easy to engage with one another, and it is also unclear to both of them what they can offer one another.

The intention of the present exploratory study is to clarify and understand this situation from the Dutch perspective. It is an initial exploration intended to review the current involvement of Dutch financial institutions with forests and to initiate a dialogue between the financial and forest sectors about the wishes, possibilities, importance, and necessities as regards responsible Dutch investment in forests.

This report summarises the main findings of the exploratory study. The study was carried out by Tropenbos International at the request of the Dutch Ministry of Economic Affairs.

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Acknowledgments and accountability

This study is of an exploratory nature, based on interviews with thirteen organisations. The interviews were confidential and the results of the study have been anonymised.

In carrying out the study and presenting the results, we have striven for the utmost care; any errors or misconceptions are explicitly the responsibility of the authors and not of those who cooperated in the study.

The interviews that we had with the various Dutch financial institutions were extremely enlightening, inspiring, and pleasant. We would like to express our thanks to those who participated in the study for making time available and for their valuable contribution. We hope that this study can form a bridge to practical collaboration between the financial sector and the forestry sector with a view to responsible investment in sustainable forestry.

Management summary

With co-financing from the Dutch Ministry of Economic Affairs, Tropenbos International (TBI) carried out an exploratory study of the involvement of Dutch financial institutions in (sustainable) forestry and their related experience and perspectives. The purpose of the study was to clarify the actual significance, limitations, and opportunities regarding investment in forests and the way in which such investment can be effectuated in a technically, socially, and economically responsible manner. The study was also intended to clarify what the Dutch (tropical) forestry and financial sectors can offer one another in actual practice, and how a contribution can be made to improving their knowledge of one another. The report sets out the main findings of the study. These are based on thirteen confidential survey interviews with pension funds, insurance companies, asset and fund managers, banks, the FMO development bank, and intermediaries. Sections 2 to 6 provide a survey and summarise information derived from the interviews. Sections 7 and 8 comprise, respectively, a qualitative analysis and a number of conclusions drawn by the authors.

Findings

The financial institutions approach forests in two ways: (a) preventing and limiting the negative impact of their activities on forests and (b) direct investment in forest projects and the timber-processing industry. Taken together, the institutions interviewed have built up a forest-related portfolio amounting to between EUR 3 billion and EUR 3.5 billion. Institutional investors invest mainly in funds, for example *Timber Investment Management Organisations* (TIMOs); on average, forestry investment amounts to no more than 1% of an institution's total investment portfolio. Banks invest to a modest extent in forests, in particular via companies listed on the stock exchange.

Investments in forests are currently primarily in North America and Europe, with the aim of diversifying the portfolio, providing cover for inflation, and generating a stable income as well as additional social and environmental benefits. The sector sees the macro-economic prospects for investment in the forestry and timber sector as largely positive due to the growing demand for timber and ecosystems services from forests. It is expected that more attention will in future be paid to investing in forests in "southern" countries. At the moment, institutions

are cautious about investing in tropical countries because of unfamiliarity with forestry in those countries and the major risks involved.

This exploratory study comes to the conclusion that more exchange of knowledge and expertise between the financial sector and the forestry sector is desirable, if the intention is to increase the scale of responsible investment in forests. Contacts between the two sectors in this regard are still limited, and the mutual opportunities are not sufficiently familiar. Considerations for a joint approach include the practical and specific development of the financial institutions' sustainability policy regarding investing in forests, pooling the necessary expertise and knowledge as substantiation for doing so, and developing more "bankable business cases" for forests.

The market in North America is virtually saturated; in Europe, investment in forests can be expected to increase in the years ahead. However, it is primarily in forests in the tropics – and then definitely in the emerging economies – that the potential for growth is high. Yet the climate for investment in those countries will need to improve for expansion of investment to take place. The financial institutions interviewed still have only limited familiarity and experience with investing in tropical forests, and the returns-risks profiles for the various forest investment options are often still difficult to estimate.

In the opinion of some interviewees and also the authors of this report, the Dutch government could encourage sustainable forestry investment in developing countries by focusing its international co-operation activities on strengthening corporate social responsibility in this sector and improving the policy and institutional preconditions for a sustainable and attractive business climate. Limitation of risks will need to form part of a public-private strategy for financing forests in the tropics. Other important elements include guarantees, hedging risks, incubator funds and seed money facilities, and – last but not least – capacity-building.

In the tropics, a significant proportion of the forestry and timber sector is made up of small businesses. Their financing requirements are often far too small for the minimum level of investment that most financial institutions apply (often EUR 50 million or more). Keying the level of financing to the relatively small-scale forestry and plantation business is a challenge. Pooling, collaborating with local financial partners, collaborating with customers by means of production cooperatives, and micro-finance schemes are options that can be investigated in this context.

A few financial institutions are already looking to collaborate with the local partners and the Dutch Ministry of Foreign Affairs (Development Co-operation).

This will require improved contacts between the forestry sector and the financial sector. That can be achieved by better information provision, capacity-building, setting up an effective monitoring system, and giving a greater role to R&D institutions in the development of business models, information provision, and knowledge-sharing.

A proposal for setting up a clearing house facility can count on wide interest. Amongst other things, such a clearing house would need to ensure that forestry experts, projects/business cases, financiers, and intermediaries can easily engage with one another. It would also allow the forestry sector to draw up more business cases and the financial sector to view all the various possibilities of forests as an opportunity. The clearing house could clarify who is doing what, and where specific expertise and knowledge/experience are available.

Acronyms

BRIC Countries	Brazil, Russia, India and China
CIFOR	Center for International Forestry Research
CSR	Corporate Social Responsibility
DNB	De Nederlandse Bank
EITI	Extractive Industries Transparency Initiative
ESG	Environment, Social and Governance
EU	European Commission
FAO	Food and Agriculture Organization
FMO	Dutch Development Bank [Nederlandse Ontwikkelings bank - Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden]
FSC	Forest Stewardship Council
GRI	Global Reporting Initiative
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
MFIs	Microfinance Institutions
MIGA	Multilateral Investment Guarantee Agency
NCD	Natural Capital Declaration
NGO	Non-governmental organisation
PEFC	Programme for the Endorsement of Forest Certification
PRAI	Principles for Responsible Agricultural Investment
PRI	Principles of Responsible Investment
PRIF	Principles for Responsible Investment in Farmland
PPP	People, Planet, Profit
REDD+	Reducing Emissions from Deforestation and Forest Degradation
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
TBI	Tropenbos International
TIMOs	Timber Investment Management Organisations

1 Background and aim of the study

Financial institutions throughout the world, including the Netherlands, are interested in investing in forestry projects. The “forests market” is a relatively new one, and investment in it involves innovative products which also constitute a niche market. Some institutions are already investing, others are still exploring the possibilities, and yet others are reducing their portfolio. So far, no systematic survey has been done of current involvement in forests, insights and perspectives, and the extent and nature of the joint financing is unknown.

The forestry and financial sectors are relative strangers to one another. In the Netherlands, there is hardly any sharing of the knowledge, experience and expertise of the investors, asset managers, and intermediaries, on the one hand, and of forestry experts on the other. In order to utilise opportunities and prevent problems, it would seem advantageous for both parties to bring about systematic inter-sector dialogue. This would make it possible for both sides to acquire more knowledge and understanding of the opportunities and problems; it would also enable investment in sustainable forestry projects to be scaled up.

It is against this background that Tropenbos International (TBI) – with co-financing from the Dutch Ministry of Economic Affairs, Agriculture and Innovation – carried out this exploratory study. The aim of this Dutch investigation is to survey the involvement of Dutch financial institutions in (sustainable) forestry and their related experience and perspectives. It aims to clarify the significance, limitations, and opportunities associated with investment in forests, and the way in which such investment can be effectuated in a technically, socially, and economically responsible manner. Finally, it also aims to clarify what the Dutch (tropical) forestry and financial sectors can offer one another in concrete terms, and how a contribution can be made to improving their knowledge of one another.

The study complements the global study *Timberland as a Component of Institutional Investment Portfolios*[1] that TBI carried out in 2011–2012 in collaboration with the Food and Agriculture Organisation of the United Nations (FAO) and the National Forest Programme Facility. That international study focuses on the involvement and perspectives of American and European institutional investors as regards sustainable forestry.

Procedure

A team of three experts with a forestry background carried out the survey interviews on behalf of TBI. A total of 18 institutions were approached with a view to their participating in the study. Five of these (3 banks, 1 intermediary, and 1 insurance company) stated that they were not interested in participating because forests did not form part of their agenda or portfolio, nor would that be the case in the near future. Thirteen institutions participated in the interviews (pension funds, insurance companies, asset and fund managers, banks, the FMO development bank[2] and three intermediary organisations).

Structure of the report

The report comprises a summary of the interviews. Sections 2 to 6 provide a survey and summarise information derived from the interviews. Sections 7 and 8 comprise, respectively, a qualitative analysis and a number of conclusions drawn by the authors of the report. The final sections are primarily intended to stimulate further discussion between the financial and forestry sectors regarding how sustainable investment in forests can be encouraged.

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[1] FAO. 2012. *Timberland in Institutional Investment Portfolios: Can Significant Investment Reach Emerging Markets?*, by R. Glauner, J.A. Rinehart, P. D'Anieri, M. Boscolo, H. Savenije. Forestry Policy and Institutions Working Paper No. 31. Joint publication of FAO, Tropenbos International, and NFP Facility. (See www.fao.org/docrep/015/an901e/an901e00.pdf)

[2] Although the study has been anonymised, FMO gave permission for its name to be mentioned because of its special position within the financial market.

2 Profile of the financial institutions interviewed

On the basis of differences in risk/reward profiles, long-term objectives, and the nature of the available capital, the authors of this report distinguish two categories of financial institutions:

1. Institutional investors, which include the pension funds and Insurance companies with their asset managers;
2. Banks, also with their asset managers.

Pension funds and insurance companies invest their capital with their own asset manager or with third parties. Interviews were conducted with their own or delegated asset managers, often together with ESG[3] staff.

Banks have in-house asset managers. These manage both assets belonging to the bank and money belonging to third parties. The interviewees were in most cases ESG staff of asset managers and in a few cases also portfolio managers at the bank or asset manager concerned.

[3] ESG stands for "Environment, Social and Governance", which the Wikipedia describes as follows: "Environmental, Social and Corporate Governance, also known as ESG, describes the three main areas of concern that have developed as the central factors in measuring the sustainability and ethical impact of an investment in a company or business. Within these three areas are a broad set of concerns that are increasingly being included in the non-financial factors that figure in the valuation of equity, real-estate, corporations and all fixed-income investments. ESG is the catch-all term for the criteria used in what has become known as Socially Responsible Investment."

The financial institutions approach forests in two ways:

1. preventing or limiting the negative impact of investing in other sectors on forests, for example in agriculture – the “do no harm” principle;
2. direct investment in forest projects and the timber-processing industry.

The following two sections explain these two approaches.

3 Environment, Social, and Governance (ESG) policy

Increasingly, suppliers of capital are asking for investments to be made in projects and businesses that pass the test of sustainability. At numerous financial institutions, the development and application of ESG criteria is being encouraged by proactive shareholders. For all institutions, sustainable investment is an explicit policy objective, and one that they promote internationally.

All the financial institutions that were interviewed said that they endorse the UN's *Principles of Responsible Investment* (PRI; www.unpri.org). Several of the parties interviewed have signed the *Natural Capital Declaration* (NCD; www.naturalcapitaldeclaration.org) and/or are involved in initiatives such as the *Extractive Industries Transparency Initiative* (EITI; http://eiti.org/) or the *Global Reporting Initiative* (GRI; www.globalreporting.org). The insurance companies that were interviewed endorse the *Principles of Responsible Insurance* (see www.unepfi.org/psi/). Reference is also made to other frameworks that are relevant to forests, for example the *Principles for Responsible Agricultural Investment* (PRAI, drawn up by UNCTAD, FAO, IFAD, and the World Bank), see http://archive.unctad.org/Templates/Page.asp?intItemID=6123&lang=1), the *Principles for Responsible Investment in Farmland* (PRIF, see www.unpri.org/commodities/), and the *Voluntary Guidelines on the Governance of Tenure of Land, Fisheries and Forests* see www.fao.org/news/story/en/item/142587/icode/).

Based on the principles of *People, Planet, Profit* (PPP), all the institutions have developed – or are currently developing – *Environment, Social and Governance* (ESG) criteria for *Corporate Social Responsibility* (CSR). Potential investments must comply with a combination of governance, social, and environmental criteria; these include preservation of biodiversity, ecologically responsible management, no corruption, no child labour, and observance of human rights.

The extent to which the criteria are applied can depend in part on the requirements of the supplier of capital. The financial institutions sometimes concern themselves actively with the corporate governance of businesses in which they invest. Two of the main strategies for exerting influence in this connection are engagement and voting at meetings of shareholders.

Some financial institutions have developed – or are currently developing – specific ESG policy regarding forests. For testing direct investment in forest projects, use is made of generally accepted standards for sustainable forest management such as FSC and PEFC, and of social standards such as the ILO conventions. For the financial institutions, timber certification is a definite requirement.

Two institutions stated explicitly that they are not involved – and do not wish to be involved – in any way in the logging of tropical rainforests or their transformation for the purpose of agriculture or mining. In that context, a number of financial institutions are participating in or following the procedures of relevant round tables (for example soya and oil palm). The construction of pipelines and other infrastructure is screened for its effects as regards the logging of tropical rainforests. Strict conditions are also applied to social aspects such as the impact on local communities ("resource-based communities").

Conclusion:
Without exception, the financial institutions subject each investment proposal to detailed analysis of its merits, profit/risk profile, technical feasibility, political and social risks and opportunities, management structure, and partners. When considering acquiring a shareholding, it is in particular the financial and ESG criteria that they apply. Certainties – or the lack thereof – determined on the basis of risk criteria are decisive in the decision-making. Besides financial returns and risk criteria, ESG criteria are increasingly decisive.

4 Investment in forest projects and the timber-processing industry

Investments in forests and timber are often allocated to the asset class of "commodities"; they consequently fall into the same category as investments in mining ores and agricultural products. Within the Dutch financial sector, investment in forests began in about 2005 as an innovation, particularly by pension funds and insurance companies. The pioneers in this field built up experience and expertise by conducting actual transactions, in particular in countries in the temperate zone. In the years following, experience has been gained with the type of risks and opportunities occurring in various kinds of products and investment models and with matters that require specific attention. Exploratory investments helped to build up a network of project developers and fund managers and to get a feeling for how to estimate their abilities.

4.1. Scale of investment grouped according to geographical area and object

The financial institutions that participated in this study have jointly invested between EUR 3 billion and EUR 3.5 billion in the forestry sector, but for none of them does this account for more than 1% of its total portfolio. Forests therefore constitute only a small part of the total investment packages. For the forestry sector, however, this is a substantial amount.

Investment in plantations and semi-natural forest involves the production of timber for use in the carpentry/joinery/furniture industry, timber for fuel, and timber for the pulp and paper industry. In temperate regions, it is primarily coniferous species that are planted; for plantations in the tropics, the most frequent species are teak, eucalyptus, acacia, and gmelina.

Table 1. Investment by Dutch financial institutions by region and object (qualitative order of magnitude)[4]

Region:	Investment object:			
	Natural/ semi-natural forest	Plantations	Agroforestry	Timber processing industry
US and Canada	€€€€€€€€	€	-	€€
Central America	-	€	-	-
South America	€	€	-	-
Eastern Europe	-	€	-	€
New Zealand/ Oceania	-	€	-	-
Asia	-	€	-	-
Africa	-	-	-	-

The majority of investments have been made in the United States and, to a lesser extent, in New Zealand, Australia, and eastern Europe. In the United States, investment has mainly been in semi natural forests, supplemented by plantations. In eastern Europe (Hungary and the Czech Republic), it is mainly plantations that are involved. This involves forest management focusing on harvesting and regenerating one or more naturally occurring types of commercial timber.

In South America, it is mainly Brazil that is of interest for investment, followed by Uruguay, Argentina, and Colombia. In Central America, Costa Rica and Belize would appear to be the main players. Investment in Asia is still limited, and there is very little investment in Africa.

4.2. Means of involvement of financial institutions in the forestry sector

Depending on their overall approach, all the financial institutions weigh up "green" against returns to a greater or lesser extent. Important considerations here are diversification, the trend towards a sustainable economy, and customer interest. None of the financial institutions has forestry expertise in house, nor do they themselves assess the silvicultural aspects of their investments; they generally engage external experts to do this for them.

4 Data provided solely by the institutions interviewed.

Table 2. Flow of investment from source to object (total amount EUR 3 billion to EUR 3.5 billion)

	Source of capital	Investment in forestry sector	
		Forests	Industry
Institutional investors	Own capital	€€€€€€€€€	€€
Banks	Own capital, Private assets, Institutional investors	-	€

The majority of institutional investors invest in funds, while some invest in completely venture capital private equity constructions. Investments vary from EUR 50 million to EUR 150 million per fund. EUR 75 million is the minimum, except in exceptional cases when other considerations are decisive, for example contributing to social objectives. Long-term objectives of forests fit in with investment by pension funds. Forests contribute to the sustainability objective and returns from existing investments are satisfactory. Where investments have been made in large areas of forests, there is a constant flow of income. There is always an area somewhere where timber is harvested.

In many cases, institutional investors invest via *Timber Investment Management Organisations* (TIMOs). These are active primarily in North America. The main function of a TIMO is to discover, assess, acquire, and manage forests as an investment object. After ownership has been acquired, the TIMO is responsible for management, with the aim being to achieve an attractive financial return for the investors. TIMOs therefore invest in both ownership and management. In general, the institutional investor invests in the TIMO as a passive investor and with a share capital of less than 50%. Deals are primarily arranged privately, i.e. not via the stock exchange. Investors are interested in "club deals" with like-minded partners (for example other pension funds, including in developing countries).

Banks participate in forest projects on a modest scale. They accept less risk than pension funds and have a greater interest in being able to free up funds in the short term. For them, money invested in trees is tied up for too long, and is in many cases not easy to turn into cash.

Banks are mainly active on the stock market for the timber processing industry and the pulp and paper industry. For them, the forestry sector is a new field. The technical and operational aspects of investing in forests and plantations have so far been insufficiently interpreted in terms to which banks can apply their investment criteria, and expertise still needs to be built up. One issue here is to what extent banks need to build up that expertise within their own organisation or alternatively make use of external expertise. There is usually hardly any direct relationship to the forests that lie behind the timber processing industry, except that in most cases FSC, PEFC, or other certification is required for the forest concerned.

So far, none of the financial institutions has formulated projects. Projects are presented to the asset managers as a business case (cash flows, rates of return), and the investor then decides whether to participate and on what conditions. It is also possible for an asset manager to actively develop a fund and to try to find interest in it within the market. This has not yet been done on a significant scale for forests, but interesting attempts have already been made.

5 Reasons for investing or not investing in forestry

5.1. Positive reasons

Institutions indicated that they invest in forests for the following reasons:

- Forests are a niche market that contributes to diversification of their long-term portfolio ("don't put all your eggs in one basket");
- Returns from existing forest investments create "satisfaction". Investment in large areas of forest produces a permanent and constant flow of income;
- Forests serve to hedge against inflation; if well managed, they always grow, regardless of the economic situation;
- Purchasing land and ownership provide the certainty of an increase in value;
- Additional social and environmental benefits, for example visible implementation of CSR policy; acquisition of tradable certificates for CO_2 sequestration;
- The need to innovate continuously and to tap in to new markets.

Financial institutions and investors wish to invest in a sustainable economy and to show that their CSR policy is a serious one. But sustainable investment must also produce returns and the risks involved must be acceptable. Investing in sustainable timber production and forest management would seem to make decision-makers feel good, something that can sometimes make just that bit of positive difference as regards deciding whether or not to invest in forests.

The position of the FMO as a development bank makes it different to the other institutions. Given its development mandate – together with the need for climate mitigation and investment in the low-carbon economy – the FMO considers it essential to explore this new field. It also has the funds for doing so. As a development bank, the FMO sees a pioneering role for itself. It wishes to remove some of the risks for other – commercial – parties by participating in investments in sustainable and responsible forest management. The financing requirement in the forestry sector is so large that development finance is insufficient, meaning that from that perspective too it is important for the FMO to contribute to the mainstreaming of sustainable forestry among commercial parties.

5.2. Negative reasons

In addition to the above positive reasons for investing in the forestry sector, there are a number of factors that lead to investor caution about doing so:

Relatively large risks

Investing in forests in temperate regions is not a very risky undertaking, but in the tropics, matters are more complex. Significant obstacles to investment and to the growth of investment in tropical forestry are the poor physical, financial and knowledge infrastructure, and problems concerning land tenure and governance. In countries that fail to comply with their own rules and where there is major deforestation, the possibilities are very limited. There is often no "enabling environment" and it is difficult to acquire certification for forests, and therefore for assets. Political instability and corruption are also a reason for staying away from a large number of countries.

One of the reasons for developing CSR policy was to prevent investment in non-sustainable activities, which include non-sustainable timber harvesting in tropical forests. Moreover, there are doubts about harvesting wood for use as a biofuel, with reference being made to the (alleged) adverse effects on the growing location, air pollution resulting from combustion, and (alleged) inefficiency as regards combating greenhouse gases.

Problems regarding the sale of participations in teak plantations have given forestry a bad reputation. (Authors' note: The return from properly constructed and managed teak plantations is in fact good.) The Dutch national bank (DNB) is critical about forest investment. The DNB applies three main criteria for this: spread of risk, liquidity, and governance. Application of the DNB standard is country-dependent; projects in the tropics have a high or unclear risk profile. The market and price risks are considered to be extremely high and difficult to estimate. In general, the DNB keeps a critical eye on financial institutions entering a new sector. The DNB considers (article in De Volkskrant in late June 2012) that for innovation – specifically as regards forests – there is often a lack of strategy and (according to the article) that the decision to invest is consequently taken on an ad hoc basis.

Social sensitivity

A significant number of the institutions that purchase forests and land have recently seen a socially sensitive problem looming up. In a number of tropical countries, land grabbing/ownership of large areas of land is becoming a growing social problem, and in the Netherlands this is becoming a political issue. Freely sellable land – supposedly "idle" land – is often not actually idle in practice, and title to such land is frequently allocated in an untransparent manner. In developing countries where the governance situation is often difficult and in remote forest areas, it is extremely difficult for investors to find the right partners/institutions.

Unfamiliarity with the sector and lack of reliable information

Another reason for not investing in forests is unfamiliarity with the sector and a lack of knowledge of forestry, afforestation methods, management, and financing. The biggest barriers here are a lack of information (lack of understanding of markets, timber pricing, state regulation, illegal logging), unregulated world trade (India, China, South Africa), and subsidies on timber imports (China).

In the tropics and in the emerging economies, there is a lack of good information about forests at all levels. The information that is available is unreliable and difficult to acquire. It is difficult to ascertain the returns, and the size of the forests given is often unreliable, as is the ownership situation. This means that investing in forests in the tropics requires separate investment in setting up one's own information structure, perhaps in collaboration with other parties. Others see the technical aspects as the responsibility of the intermediary. In a few cases, institutions do not invest because they do not have their own offices in the forest countries.

Scale of financing ("scalability")

Forestry projects in the tropics are generally on a much smaller scale than the minimum size of an interesting investment, and the business case is often too small. Institutions then need to incur relatively high costs for small-scale financing. The minimum investment size is usually EUR 50 million to EUR 75 million, but with preference being given to projects amounting to EUR 100 million or more.

The preliminary process of setting up a good, solid fund accounts for 5% of the size of the fund. The contribution of forestry expertise amounts to about 1/10 of that 5%. Most of the costs are often incurred for the legal cover for fund components (limitation of risks by means of exclusions etc.)

Setting up a new fund requires a great deal of time and an investment in know-how (including because of the stringent monitoring in Europe). Setting up a fund takes about a year and one then still needs to wait and see if there is any interest in participating. The transaction costs are high. One possibility envisaged for avoiding this problem is to package several projects in a deal (for example via TIMOs).

Bankable business cases

One major problem is the lack of a bankable business case (and investment managers) for forests. The financing requirement, scale and size, and consequently the financing structure are often unclear (business, project). Estimating the most suitable financial product is hampered by forestry experts' lack of knowledge of the financial sector and vice versa. There are too few forest investment managers who can formulate an effective project in tropical countries, although numbers are slowly increasing.

6 Perspectives and development

General

Depending on the institution's objectives (more or less "green"), financing sustainable forest management and afforestation is appropriate to a greater or lesser extent.

The macro-economic forecast for investment in the forestry and timber sector is positive. The growing world population and prosperity are expected to lead to increasing demand for timber and other forest products, while increasing scarcity of land is pushing up the price of land and raw materials such as timber.

Geographical orientation

Most existing investment is in temperate regions. Possibilities are being investigated in North America but also in Australia. The market for forest investment is larger in the United States than in the rest of the world put together because many of these forests are in private hands. There is little room, however, for expansion of the North American market.

The scale of forest investments is still small, particularly in the tropics. At the moment, many financial institutions are adopting a "wait-and-see" attitude. Besides the positive valuation of forests as an investment object, forests are also a reason for a defensive approach resulting from the do-no-harm policy.

However, the demand for timber and timber products is expected to increase due to the use of timber for energy generation and the increasing size of the global population. In general, it is therefore expected that more attention will in future be paid to investing in "southern" countries and emerging economies. Investing in responsible sustainable forest management can therefore become a serious option.

The returns are higher but so are the risks. The financial institutions see Latin America (particularly Costa Rica, Colombia, and Brazil) as a region with potential: there is a reasonable infrastructure and favourable growth conditions for short-rotation tree species. Recent interest is expressing itself as tentative exploratory studies. This also applies, to a lesser extent, to other continents (Africa, Asia – Vietnam, Thailand, Malaysia).

Ecosystem services

At the moment, land and timber are the values that form the basis for cost-benefit and risk analyses. Other forest functions are (as yet) considered to be too uncertain or too risky. There is little interest in paying for environmental functions. The market is considered to still be too small and uncertain. Nevertheless, developments are in fact being followed. The financial institutions are rather sceptical where a number of specific services are concerned:

- Carbon: as long as there is no organised compliance market, the carbon price in the cost-benefit analysis is set at zero. The future of REDD+ is uncertain. The market for CO_2 credits does not really seem to be developing (including because of fraud scandals). The compliance market is (for the moment) failing to get off the ground, and the value of credits on the voluntary market has fallen considerably.
- There is not yet any market for biodiversity and one is not expected to develop for the present (including as a result of experience with the slow development of a reliable forest carbon market).
- Water is considered to be too risky given the political importance of water rights.

Some institutions see the food and agri-business as a potentially stronger future proposition than forestry in the tropics, although in the case of pension funds it also forms only a relatively small proportion compared to forestry. Agroforestry is still an open field. One advantage of agroforestry models that was mentioned is that they produce very quickly and minimise the start-up costs for afforestation.

South-North partnerships

Virtually all institutions are interested in collaborating with local partners in emerging economies (or are already doing so). Those partners are local institutional investors, for example pension funds, but also micro-finance institutions (MFIs). The latter fit in particularly well with the strategy of impact financing pursued by various banks in emerging markets. Experience in micro financing has already been gained in other sectors, but not in the forest sector. Micro-financing is subject to intensive guidance. For small producers, it is a suitable but expensive type of financing and the user also pays for it. Interest rates for micro-finance are often high (about 30%), depending on the risk. The financing does fit in well with the traditional local informal provision of credit.

Differences in appreciation and approach

Pension funds were reasonably interested in long-term investment in the forestry sector. They find forests interesting because of their production basis, as a real asset, and from the perspective of CSR. The forests portfolio is expected to make up a maximum of 5% (between 1% and 3 %) of the total capital invested. Investment will be mainly in – or with the aid of – TIMOs. Returns are currently 4–5% and the economic crisis is impeding further expansion of investment in forests.

Actual investment in forests by banks is still limited, and banks are very cautious about entering this new arena. A few of them see realistic options in the framework of micro-financing and investment in the timber processing industry, but not so much in investments in forests as such.

Four of the banks interviewed and one insurance company do not expect to invest in forests in the near future. Referring to the obstacles cited in section 5.2, they wonder why investment in forestry should now suddenly have become favourable. By contrast, the asset managers of three banks are thinking of expansion, and they are engaged in exploring the market, building up networks, gaining experience, and experimenting with small funds of up to EUR 15 million.

7 Analysis

The authors base the following analysis – like the conclusions in section 8 – on the interviews and on their own knowledge of the forestry sector and the literature. The analysis and conclusions are intended to be a basis for further discussion between the financial and forestry sectors regarding how responsible investment in forests can be encouraged.

Diversity in financial institutions

The financial institutions that were interviewed differ as regards their investment objectives, financial products and services, scale of investment, risk profiles, sector and geographical focus, and knowledge/experience of the forestry sector. They are unfamiliar with the variety of options offered by the forestry sector. What one institution considers important may not be so for another.

Diversity in investment options in forests

Like the financial sector, the forestry sector displays great diversity, which offers a variety of options for investment:

a. Diversity in the type of forest: natural forest; semi-natural forest; recovery of degraded forest and the development of buffer zones to protect valuable forest ecosystems; plantations; combination of agriculture and forestry (agroforestry).
b. Diversity in the activity on which the investment focuses: forest management including timber harvesting; afforestation and creation of plantations; timber-processing industry.
c. Geographical diversity: industrial countries like those of North America and Scandinavia; tropical countries; and emerging economies like the BRIC countries and eastern Europe.

There is little room for expansion of the North American market. In some European countries, for example France and Hungary, it is still possible to expand the area of forest. In general, it is expected that more attention will in future be paid to investing in "southern" countries and emerging economies.

ESG policy

One common concern is the development and integration of ESG/CSR policies relating to forests. There is an impression that Dutch financial institutions are among the leaders as regards sustainability policy. This means explicitly linking CSR policy to other sectors – including preventing damage to forests – and applying criteria for effective forest management. The downside of this is that in some cases so much CSR policy is developed – or has been developed – that investing in sustainable forest management becomes impossible. The right balance between CSR policy and investment in forests has yet to be found. Investment is strongly driven by certainties and risks.

Perception and image

Most financial institutions generally have little knowledge or understanding of investment in "green" (agriculture and forestry), specifically in tropical forests. Knowledge of tropical forests and forestry as an investment object and the diversity of options that this offers for institutional investors are limited. Insight into what is necessary is therefore largely absent. The institutions assess the returns/risk profile, cash flows, and the added value/diversification of this asset in their portfolio, leaving further elaboration – both socio-economic and technical – to others. The institutions scarcely involve themselves with this directly, if at all, but they naturally take account of it in their final assessment. The expertise base within the financial institutions is still only narrow, and the question arises of whether it is sufficient for effective communication with the forestry sector, selection of projects, and management.

Fraud and negative publicity regarding plantations (problems with the sale of stakes in teak plantations) and forests (deforestation resulting in loss of biodiversity, conflicts with the local population, and CO_2 emissions, illegal logging, land grabbing) overshadow the potential that plantations, reforestation, and natural forests have as a stable investment object that contributes to diversification of the investment portfolio, and the implementation of CSR policy. In view of these positive aspects, forests normally fit well into the investment portfolio of institutional investors, especially pension funds, given that these in fact have a long-term focus.

The (tropical) forests sector has so far also made insufficiently clear why there is a need for investment in the forestry and timber sector, when and how much money is needed, for how long, and what the returns are. The sector has so far failed to spotlight forests as an investment object and to explain the main financial features. The forests sector has a lack of know-how regarding how to formulate an effective business case. This leaves the opportunities underexposed.

On the other hand, the financial institutions ought to do more to articulate their demand, financial products and services, and conditions.

The shared challenge is to convert the view that there is no commercial reason for investing in forest management and/or afforestation into a positive attitude and an investment strategy for forests. Three things are necessary for this to be done:

a. Sufficient justification for investing in forests, from the financial, socio-economic and technical forestry perspectives; co-operation between the forestry sector and the financial sector, including in the Netherlands;
b. Sufficient "bankable business cases";
c. Demonstration that the factors that have in the past led to tropical forests having a negative image as an investment object do not apply to the business case concerned. Above all, make use of the learning moments from the past to substantiate the business case.

Returns

Additional income from goods and services other than timber can contribute to financially attractive and competitive forest management. In general, the institutions are extremely sceptical – certainly as regards the short term – about the possibilities that ecosystems services such as CO_2 sequestration and the supply of clean water can contribute to returns. That is partly justified, but we think that there is a need for information and guidance as to how best to key in, with investment in forestry, to the voluntary market and a possible future compliance market (REDD+) for CO_2 emission rights. This requires direct knowledge of the forests discussion and feelers at the institution so as to take action at the right moment.

Experience shows that it is useful to have a financially independent expert produce return calculations for the planned forest projects and then to compare those calculations with those drawn up by the financial institution itself. It is also advisable for them to also be assessed by independent forestry experts as regards their silvicultural and socioeconomic merits.

Risks and risk cover

VEstimates of returns, certainties, and risks for investments in the forestry sector often extend no further than assessing the fund or institution in which the investment is made. The financial reality of the actual forest investment object then remains largely hidden behind the information about the fund or institution itself. However, the relatively long term of the investment – at least in plantations – and the uncertain situations in some countries mean that risks are estimated as being high.

It therefore seems prudent to gain a greater understanding of the key financial figures and the certainties/uncertainties of the investment itself in the forest object. A better system for assessing the risks and a system in which "early loss" would be covered can be helpful. For the "softer" types of financing – for example with cooperatives, associations, and community plantations – it appears advisable to set up a risk mitigation/guarantee system, perhaps co-financed by development institutions (public and private). There is increasing interest in the latter, but a lot still remains to be developed in that field. Public-private partnerships would seem to be attractive in this connection.

In addition, the public sector (national and international) could play a role with respect to risk mitigation, provision of guarantees, incentives, reducing transaction costs, etc. which would make it more attractive for the private sector to invest in sustainable forestry. Within the World Bank Group, there is a specific facility for investment guarantees, namely the Multilateral Investment Guarantee Agency (MIGA), but that institution is now active primarily in sectors other than forests.

The Dutch government is increasingly encouraging the role of the commercial sector – in the Netherlands and in developing countries – in implementing its international co-operation policy (*From Aid to Investment [Van hulp naar investeren]*)[5]. In order to improve the business climate and the creation of preconditions, the government has set up a number of programmes and business tools to support the commercial sector and to promote co-operation with the authorities. Based on experience gained and new insights, an expansion of the range of tools is foreseen. Up to now, however, few specific preconditions and tools have been created for responsible investment and business in the forestry sector in development co-operation countries. Financial institutions, business, and government should jointly consider to what extent the existing range of government tools for forests is in fact useful, and what additions are desirable and feasible. The Dutch government should focus on promoting co-operation between the forestry sector and financial institutions in the Netherlands and in development co-operation countries. Putting development co-operation funds into such initiatives can be expected to have a greater multiplier effect

[5] See the brochure "*Van hulp naar Investeren: een overzicht van instrumenten voor een beter ondernemersklimaat en internationaal ondernemen in ontwikkelingslanden*" (www.agentschapnl.nl/sites/default/files/bijlagen/Brochure%20van%20hulp%20naar%20investeren.pdf).

and promote sustainability more effectively than investing such funds directly in projects and programmes.

What is important as regards certainties is the real estate (ownership/no ownership; land register) and stability in the country. These are weak points in many tropical countries. Experience shows that one should not, however, exaggerate such uncertainties and the seeming impossibility of tackling them. There is in fact such a thing as certainty that is "good enough".

Financing match between large and small ("scalability")

For a forestry project in the tropics – certainly when a major population component is involved – EUR 50 million (the investment minimum indicated by the financial institutions) is a large amount. Many forestry enterprises there are only on a small scale, comprising mainly smallholders or communities. Keying large-scale financing to the relatively small-scale forestry and plantation business is a challenge. Consideration can be given to clustering multiple projects with small producers in a single package ("pooling mechanism"), for example in a fund. Producer cooperatives could also be set up, if necessary in partnership with cooperatives in the Netherlands, or with their support. Support could perhaps be provided for this by the Dutch Ministry of Foreign Affairs (Development Cooperation) or NGOs such as the *Doen Foundation [Stichting Doen]*.

Some of the banks stated that for the smallholders within the timber chain, a relationship with micro-finance institutions is an option. The smallholders would then have access to a reliable formal source of financing, vis-à-vis which they would undertake to act in a socially responsible manner and to acquire their timber from a legal and if possible sustainable source. For developing effective micro-finance, a knowledge of the physical structure of the local and often informal timber chains and of the local economy and culture is crucial. The local network of civil-society organisations can assist with this. The knowledge currently being acquired by Tropenbos International and others in tropical countries – and the associated co-operation networks – will be able to make a welcome contribution to this.

Business case

The (tropical) forests sector has so far also made insufficiently clear why there is a need for investment by institutional investors and banks in the forestry and timber sector, how much money is needed, how soon, and for how long.

There are as yet not enough "bankable business cases" of any size. This is a major problem. The forestry sector itself has insufficient experience of formulating properly organised bankable forest projects, while the financial institutions are waiting to see what comes their way. There is a gap in the market. The challenge will be how to bring together the various parties – each of which holds a piece of the puzzle (know-how/expertise, money, contacts, etc.) – in order to set up a partnership deal. The business case must create confidence as regards:

- the quality of the management;
- the marketing possibilities for the products;
- control of the risks;
- returns.

Lack of a common "language" and network

We have observed that there is a divide between the (tropical) forests sector and the financial sector. Organisations in both sectors need to have a minimum of knowledge and understanding of the other. We consider that that is not sufficiently the case in either sector. There is hardly any contact between them, and there is mutual ignorance and misunderstanding about one another's concepts and terminologies and way of working. They are also insufficiently aware of the diversity of options that they can offer one another. Developing communication, a common "language", and laying down connections through joint action between the two sectors is in everybody's interest. We consider that more direct involvement is necessary on the part of forestry experts in the further development of CSR criteria and investment analyses by financial institutions. It is also necessary to provide an understanding of processes and procedures for assessing sustainable forest management and legality. From our point of view, there is a "missing middle" for the tropics between the forestry enterprises and the financial institutions, concerning information, expertise, and capacity. To a very large extent, the network of facilities and specialists – with their specific expertise and services (tropical silviculture, financial, social) – that can create a bridge between forest managers and financial institutions still needs to be developed.

Knowledge, expertise and capacity-building

- *Specific information and knowledge of countries and the potential for forest investment.*

  Most western investors and intermediaries still have only a limited track record, experience, and expertise network for doing business effectively in forests in the tropics and emerging economies. This is a serious matter of concern because it brings with it the risk of not properly assessing issues such as land tenure, inadequate and/or incorrect involvement of the local population, and working with suspect local parties. Contacts between the Dutch financial institutions and reliable local financial institutions with a professional network of technical, social, and financial experts will promote options for effective investment in the forestry sector.

- *Capacity-building*
  The lack of "bankable business cases" creates the necessity of enabling actors in the forestry sector to know and understand more about the financial/investment world and, conversely, of enabling those in the financial world to learn more about the expertise available within the forestry world and to make use of that expertise. Investment in the forestry sector requires capacity and expertise to be built up, "critical coaching", and advice from investment managers with a knowledge of both sectors. This applies not only to Dutch institutions but also to potential partners in the tropics and emerging economies. Capacity-building is necessary for both sectors. Training is primarily the responsibility of the financial institutions and the forestry sector, but in the development co-operation countries it can be facilitated by means of international development co-operation.
- *Monitoring and evaluation system*
  There is no effective information, monitoring, and evaluation system focusing on investment in forests. Developing such a system is a shared challenge for both the forestry sector and the financial institutions.
- *Clearing house*
  Businesses and funds do often wish to invest in forests or owners of forests require financing, but they have no idea whom they should approach. A clearing house that would ensure matching between projects/business cases and financiers and intermediaries would make it possible for them to meet, share experience, and learn together. The clearing house could clarify who is doing what and where specific expertise and knowledge are available.
- *Role of research and knowledge institutions*
  Research, knowledge, and training institutions in the field of tropical forests such as Tropenbos International, FAO, CIFOR, and others contribute not only by conducting studies and providing knowledge; they can potentially also play a role in creating coalitions between different types of parties, in developing a common "language", and in facilitating transitions within the sector. This applies just as much to comparable institutions with a specifically financial and economic background.

8 Conclusions

The forests in the tropics and the emerging economies offer potential for new investment initiatives.

Most existing investment is in temperate regions, above all North America. There are opportunities in exploring emerging markets and the tropics. The rapidly increasing demand for timber in and from markets in "the South" is leading to new possibilities, including for sustainable investment in forests. This also has its limitations. The returns are perhaps higher but so are the risks. Forestry in developing countries is an emerging, new kind of investment, with which little experience has so far been gained and for which the market is only in the initial stage of development. The administrative and socio-economic context of the country must be properly investigated before a decision is taken to engage in long-term investment and involvement. The approaches and tools for estimating and tackling opportunities and risks are often laborious. On the other hand, tropical timber is of higher quality and/or the growth of the trees is spectacular, with corresponding yields.

The availability of information, knowledge, expertise, and capacity for investing in "southern" countries and the emerging markets, including pilots from which to learn, will therefore deserve greater attention.

Negative publicity from the past still affects the current image of investment in the forestry sector.

The justified critical publicity in the past regarding the sale of stakes in plantations, illegal logging, and deforestation have drowned out the positive aspects of investing in tropical forests. Mistakes were made in the past due to unfamiliarity on the part of the financial sector with the forestry sector, and vice versa. Efforts must be made to prevent such mistakes being repeated. In order to make effective use of the current opportunities for investment in forests, it is necessary to ensure a better and more active exchange of knowledge and information regarding the background and relevance of that negative publicity for future investment in forests.

There is a need for systems for assessing the opportunities and risks involved in investing in the forestry sector, and how to key into them.

For the institutions concerned, investing in forests – certainly in the tropics and in emerging markets – is still an innovation or an exploration. For any further interest, institutions will benefit from the development of a targeted expansion and CSR strategy for forests in the tropics and emerging markets. The strategy to be developed will be different – depending on the risk profile – for the various types of institutions, and will in any case need to comprise a number of the following elements:

- The availability of information, knowledge, expertise, and capacity regarding the forestry sector and the quality of the enabling environment (i.e. the institutional and social context) in the countries concerned;
- The development of improved systems for assessing the opportunities and risks involved in investing in the forestry sector. Where risk assessment is concerned, a system could be developed based on the categorisation in the following box[6].
- Improved reporting, monitoring, and evaluation. This would increase confidence in investing in forests.

1. *Physical Risks,* including fire, insects and diseases, windstorms and flooding
2. *Technical Risks* including access to good genetic material, sound and proven silvicultural experience, access to reputable valuation and property management service providers.
3. *Economic Risks,* including market volatility, currency movements, inflation and interest rates.
4. *Business and Commercial Risks:* including fraud, corruption, labour disruption and labour shortages, weak counter-parties or business execution capacity, lack of infrastructure.
5. *Political and Policy Risks* including expropriation of assets, changes in tax regimes, uncertain property rights, changes in policies affecting costs or market access.
6. *Reputational and Sustainability Risks:* environmental impacts, social impacts, conflict over indigenous land rights, and disruption of operations

[6] From Tineke Lambooij, Nyenrode Business University.

There is a need for "seed capital" facilities and tools covering risks

The fact that forest projects in tropical countries are currently considered risky and are also a relatively new field for various actors means that consideration must be given to how new investment and innovation can be properly shaped, and what conditions must be created for promoting this. This could involve a combination of seed capital facilities and risk mitigation instruments, for example guarantees, insurance policies, and cover for "early loss". Private-public partnerships could be a solution to this.

Greater attention to the development of "bankable business cases"

There are as yet not enough "bankable business cases" of any size. Developing these – particularly in the tropics and emerging economies – has high priority and consideration must be given to which actors should play a role in doing so, and how.

The match between large-scale provider and small-scale producer

At the moment, there is no financing match between the large-scale financier and the small-scale user, despite there being a major need for this. It is necessary to determine to what extent pooling mechanisms and the application of the concept of micro-finance is a solution to matching financing to the needs of small-scale users. Some institutions are interested in developing micro-finance for forestry activities, or perhaps in financing the trade in sustainable forest products in collaboration with farmers' organisations.

Final conclusion:

Reinforcing knowledge-sharing, contacts, and co-operation between the forestry sector and the financial sector is an essential step towards expanding responsible investment in the forestry sector, especially in the tropics and emerging economies.

Good information, focused and systematic strengthening of reciprocal knowledge, insights, and contacts between networks within the forestry sector and the financial sector will have a positive effect as regards increasing the scale of investment in the forestry sector. A number of financial institutions at present appear to consider it unnecessary and/or impracticable to have forestry expertise in house and/or available, and prefer to rely on external expertise.

To a large extent, where investing in forests in the tropics is concerned, the capacity and infrastructure of specialised expertise and tools still need to be developed. In addition to specialised service providers, there is scope for intermediary agencies/organisations that set themselves the task and have the ability to bring the financial world and the forestry world together.

Businesses and funds that wish to invest in tropical forests often do not know whom they should approach. Conversely, the same applies to forestry projects that are in search of financing. This problem could be solved by setting up a clearing house with the following functions:

- Bringing supply and demand together (parties, expertise, information, knowledge);
- Strengthening contacts between the Dutch financial institutions and reliable local financial institutions in tropical countries and emerging economies, with a professional network of technical, social, and financial experts. Existing networks of contacts of Dutch tropical forest experts in those countries can play a role in this.
- Making knowledge and experience on both sides available in the form of best practices and good guidance, including the development of specific criteria and tools for assessing and implementing investment in forests. These could be incorporated into international guidelines such as the Principles of Responsible Investment, etc.