

VALUE FROM WORLD'S FORESTS

Actually, I should say "values". But let's discuss that a little later.

Indufor has experienced changes again in early 2008. In January I started as the Managing Director. Previously I have worked at Indufor from 1992 to 2005. From autumn 2005 to the end of 2007 I was at the World Bank in Washington, D.C., as Senior Forestry Specialist and FLEG Task Team Leader. I am sure that this experience can be put into good use in my new job at Indufor.

After last year's purchase of Indufor's shares by the management and staff, we have kept ourselves busy serving our clients, and also with important internal tasks. A participatory process among the staff to determine our core values has been particularly rewarding. The process led from individuals' personal views to a common understanding of what we together as Indufor stand for. There is no need to list these values here – except for the first one "**appreciation of forest values**".

We talk about forest values in plural: we do believe that forests have many different values. The traditional "value chain" – from forest management to delivery of end products to markets, is no longer the only traded and commercial value of the forest. There are also other benefits; benefits to all people or benefits to different groups of people. All are important and can enhance the total value of forests for owners and managers.

Currently, the most discussed of these non-traditional forest values is related to the fight against climate change: for example the role of forest plantations as carbon sinks. Another aspect in this battle is reducing deforestation and forest degradation (or REDD), which could cut up to one fifth of global carbon emissions. This is now a hot topic in the climate discussions worldwide, and could become an important part of the post-Kyoto agreement beyond 2012. Indufor is putting a lot of emphasis on developing practical approaches to REDD, both regarding baselines and monitoring, and defining effective strategies for implementation.

Other forest values are better known, but still often not enough appreciated in forest management and governance: the role of timber and non-timber forest products in rural development and poverty reduction, biodiversity conservation in both protected areas and production forests, role of forests in ensuring people's access to clean water, forests as a source of energy – including second generation bioenergy – and last but not least:

forests as a source of relaxation and recreation for city-dwellers.

The main challenge in our work is to help our clients to find ways of reconciling and enhancing these different and changing values of forests in their daily and long-term management.

This second issue of Indufor's Newsletter has an interesting article on our new venture with VTT – Technical Research Center of Finland: the study on a forest satellite. The satellite could be an important tool to monitor the world's forest cover, for example for the forthcoming global REDD initiative, and for producing more reliable forest information for forest planning and policy formulation in general.

Another theme is Indufor's approach to forest plantation development. We have the pleasure to share with you a brief interview of our honoured client in China, Mr. Anthony Ng, Owner and CEO of Cathay Forest Products Corporation.

I hope you enjoy the articles !

Tapani Oksanen
Managing Director
Indufor Oy



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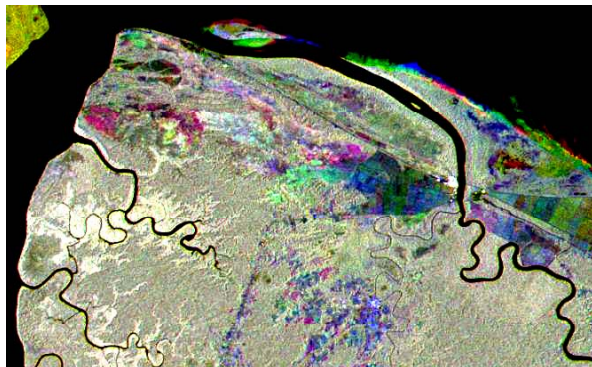
NEWS FROM INDUFOR

- Mr. Petri Lehtonen has been nominated as the Deputy Managing Director of Indufor Oy.
- Indufor carried out the Mid-Term Review of the Finnish-Russian Nature Conservation Cooperation for the Finnish Ministry of the Environment. The Review covered the period from 2004 to 2008. Best results have been achieved in the development of parks in line with highly developed standards and establishing networks between national parks and specially protected areas in North-western Russia.
- Indufor will provide support services to the Embassy of Finland in Hanoi under a long-term framework contract agreement. Services cover the management of forest policy, forest plantations, reforestation, biofuel production and biodiversity conservation, forest industry, and forests and climate change.

FOREST SATELLITE

Deforestation may be monitored in a more efficient manner in the future. A global forest satellite can assist in monitoring deforestation, and support forest inventories and research, by providing good quality data on forests. Indufor and VTT – Technical Research Center of Finland assessed the feasibility of launching a polar orbiting satellite for this purpose.

Indufor and VTT assessed the feasibility of launching a polar orbiting satellite that regularly acquires super high-resolution optical images using statistical sampling principle, as originally proposed by VTT in 2005. The proposed satellite mission is designed to assist policy makers, civil society actors, forest industry decision makers as well as the scientific community by providing homogenous, reliable and transparent data on forests globally. This could be utilized to improve countries' forest inventory, for research purposes and also to monitor deforestation and forest degradation.



Forest cover changes in French Guyana 1992-2006. ERS and ASAR radar data. Resolution ~30 m. (Photo © VTT)

Two main driving forces for the mission proposal are the known inaccuracies in current global and regional statistics on forest cover and land use change dynamics as well as the monitoring needs for future policies regarding reduced emissions from deforestation and forest degradation (REDD).

Accurate Monitoring of Forests, Land Cover and Carbon

Study findings prove the need for accurate remote sensing data, which the proposed mission would provide, to be used in global and national forest monitoring, especially to facilitate the implementation of future policies regarding avoided deforestation and degradation of forests. One of the main recommendations from the study included piloting the proposed systematic sampling method using existing similar data sources in a country that is currently active in foreseen REDD activities.

Ilkka Norjamäki, Forest Inventory and Remote Sensing Specialist, Indufor Oy

INDUFOR'S PLANTATION FORESTRY SERVICES

The increasing importance of plantation forests is making it the fastest growing business area for Indufor. Indufor operates today in all of the important plantation forest regions in the world and has developed a unique in-house competence in plantation forestry. The most promising areas for new plantations are in Latin America and in South East Asia. In addition, several African countries have become attractive tree growing targets.

Expansion of the world's forest cover is considered as one of the key means for preventing global warming. The fact that forest ecosystems store more carbon than the atmosphere and that deforestation is the second largest source of carbon emissions after energy production, are widely acknowledged.

While deforestation continues, the demand for forest products, namely wood, fibre and bioenergy, is growing in all the developing markets. This trend has urged continuous investments to expand plantation areas in order to satisfy the growing forest product demand. Already 40% of the world's industrial wood originates from plantation forests according to FAO. The share of plantation wood is estimated to reach 80% by 2040.

Sustainable Economic Development in Poor Rural Areas

Forest plantation investments create business opportunities for local people in tree growing and service provision. Many smallholders could hardly produce wood in profitable terms without the benefits that large-scale investors have brought, i.e. technology, infrastructure, market access and management skills.



Aerial view of reforestation areas in Guatemala (Photo Petteri Seppänen, Indufor)

Forest plantations also create production opportunities for local mechanical wood processors, other wood industries, and local service providers. As a result, plantation ventures contribute substantially into sustainable economic development often in remote and poor rural

areas. Indirect working opportunities exceed the direct jobs created by plantation forestry.

Plantation Forestry Investments Create Wealth and Environmental Benefits

Investments in plantation forestry are typically long-term ventures, even if the tree species might be called “fast growing and high yielding”. Cash flows from new plantations are commonly negative during the first ten years. In forest investments the capital is tied in biological assets whose value will increase solely due to the biological growth of trees. Despite of wood price fluctuations, the biological growth process transfers solar energy and soil nutrients steadily into new growing stock. It is estimated that biological growth represents 65 to 75% of the asset value growth while price changes represent 25 to 30% and land value 2 to 5%.

Because biological growth is independent from economic cycles, the value development does not correlate with the stock market development. With these characteristics, forests are extremely attractive investments options for institutional investors that consider long-term portfolio returns. The forest industries’ motive to invest in plantations is to ensure the long-term wood supply at a competitive cost, especially in emerging market economies.

In most cases, new forest plantations are established in unproductive land areas that were previously used for agriculture or pasture. Such plantations create also opportunities for conservation of natural forests and improve income generation for local communities and overall wealth creation in rural areas.

Social Risk Management Reduces Conflicts

Appropriate technological choices are fundamental for successful forest plantations but are not sufficient to ensure successful and sustainable business outcomes. Recent experiences have proven that comprehensive risk mitigation and management is another crucial part for success; this includes the special consideration of environmental and social risks.

The most important ecological risk mitigation measures are related to maintaining and expanding local ecosystems and biodiversity. New plantations have given financial opportunities to rehabilitate natural ecosystems. For example, in Brazil, significant areas of Atlantic rainforests have been rehabilitated thanks to plantation investments where almost half of land areas are being conserved.

The most difficult and challenging risk is related to the management of the complex social environment. Local people must benefit from the forest plantation investments, and the benefits have to exceed the benefits of alternative and previous land uses. According to our experience, social risk is not significant in areas where

forest ownership is equitably distributed and the spectrum of beneficiaries is wide. We have also learnt that investors, who have taken proactive actions benefiting local communities, have significantly reduced the risks of local conflicts.



Mature Eucalyptus grandis plantation in Uruguay (Photo Petteri Seppänen, Indufor)

Successful plantation forest ventures are based on careful planning taking into account different stakeholders, appropriate technology choices, and sustainable silvicultural and environmental issues.

Indufor Know-How in Developing Plantation Forestry

Development of profitable and sustainable plantation forestry requires a combination of expertise in several complex areas such as:

- climatic and soil conditions
- species selection
- forest genetics
- plantation technology
- biodiversity
- soil and water conservation
- landscape and environmental planning
- harvesting and transport solutions
- local community development

Applied scientific research is increasingly important and essential for sustainable silviculture.

The most requested Indufor services comprise screening and assessment of potential new plantation sites, valuation of forest assets, social risk assessments and environmental monitoring. In order to respond well to our client’s demand we have established multidisciplinary and multicultural expert teams that understand the complex issues related to plantation forestry.

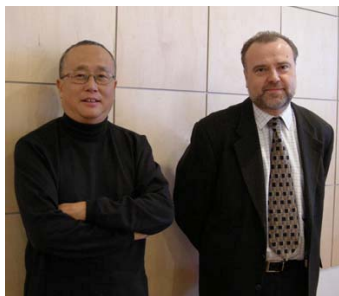
Petri Lehtonen, Deputy Managing Director, and Petteri Seppänen, Senior Forestry Consultant, Indufor

CATHAY FOREST, CHINA – CLIENT TESTIMONY

Indufor has been advising Cathay Forest Products since 2005. Services include resource assessment and wood flow calculations, financial analysis, environmental impact assessment and asset valuation. Indufor has also designed a logging company for Cathay Forest based on sustainable management of a forest concession area. It has outlined mechanical wood processing alternatives and due diligence of existing industrial facilities that are being considered for acquisition. Our services cover several locations in central, eastern and northern China, and South-Eastern Russia. Below is an interview with Mr. Anthony Ng, CEO of Cathay Forest Products Corporation.

How did you learn about Indufor?

Cathay holds constant communication with the International Finance Corporation (IFC). Cathay has no business relation with them, but good friendship. When a need for forestry consultants became evident in Cathay, IFC's analysts recommended Indufor.



*Mr. Anthony Ng, CEO and owner of Cathay Forest Products Corporation together with Petri Lehtonen of Indufor.
(Photo Janne Löytömäki, Indufor)*

Why do you use Indufor?

The Finns are famous in forest management and related technologies, they are experienced, efficient and friendly to work with. Human factor – chemistry between consultants and our staff is determinant. Indufor is able to provide services that Cathay needs.

How does Indufor add value to Cathay's forestry operations?

Currently Chinese foresters who were trained in China manage Cathay's forestry operations. Cathay's senior staff have no forestry background, they are mainly financial and business administration people. Indufor can bridge the gap between Chinese foresters and Cathay's business managers. In the long run, Indufor's consultants strengthen our forest management by developing new solutions for commercial forestry.

What other consultants do you use?

Of course in other areas we use other consultants, such as legal advisers. In forestry we believe in dealing with one firm only. It is essential that the industry, investors and other stakeholders accept the services of our consulting firm.

Interview by Petteri Seppänen, Indufor Oy



H. E. Dr. Paavo Väyrynen, Minister for Foreign Trade and Development of Finland (Photo Lily Linin, Berhan China)

MERGERS AND ACQUISITIONS SEMINAR BY BERHAN INDUFOR

Indufor hosted a joint seminar with Berhan Ltd in Shanghai on M&A during the visit of a Finnish Business Delegation to the People's Republic of China in January 2008. H. E. Dr. Paavo Väyrynen, Minister for Foreign Trade and Development of Finland opened the seminar.

Minister Väyrynen stressed the importance of sustainable forest management instead of mere forest protection in his opening remarks. Indufor and Berhan announced a joint venture focusing on advisory services in relation to mergers and acquisitions (M&A) within the forestry and forestry industry cluster.

The seminar audience heard Dr. Nie Xiaorong, Professor at the Business Management Institute, Jiang Xi Science and Technology Normal University, describe the Chinese paper industry development in recent years. "Forestry and forest industry in the BRIC countries offer significant growth opportunities for Western companies. For example, China has both a rapidly growing domestic market and numerous expanding export companies, and many Chinese companies are searching for partners for continued growth", said Mr. Tapani Pakkasalo of Berhan Indufor. Guests from leading international and Chinese paper and forestry companies, machinery suppliers, China Paper Association and the Finnish Business Delegation attended the seminar.

Background

Indufor and Berhan formed a M&A Joint Venture focusing on emerging markets in early 2008. The two companies have complementary skills with Berhan's strong M&A experience and work in the emerging markets China, India and Russia and Indufor's extensive global forestry and forest industry knowledge. The new joint venture, called *Berhan Indufor*, is equally owned by the two partners.

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