



## **Business Development Facility**

**Bringing the value of ecosystem services  
to forest enterprises bottom line**

**International Tropical  
Investment Forum**

**April 2006**





## Objectives of Forest Trends Business Development Facility

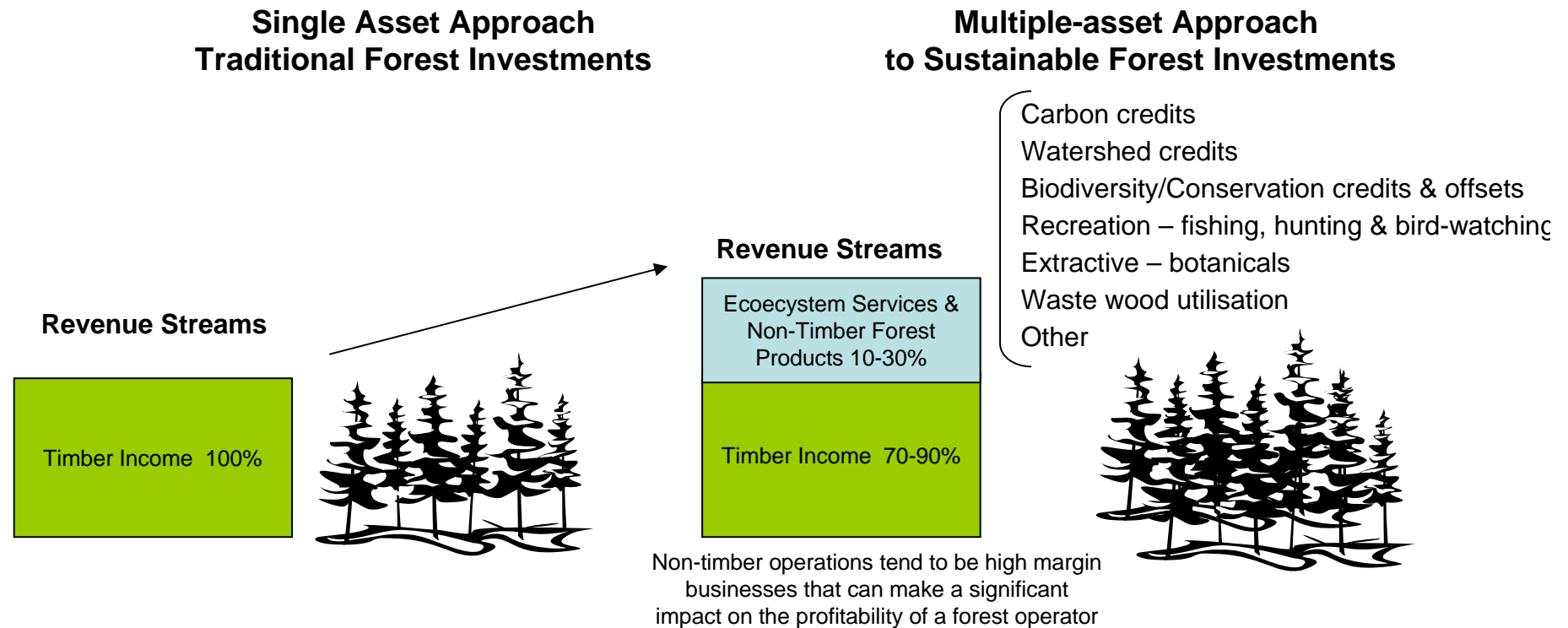
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1. Develop a portfolio of forest-based ecosystem services and non-timber forest products businesses with forest operators to;
2. **Demonstrate that sustainable forestry, with multiple revenue streams from ecosystem services and non-timber forest products in addition to timber, can generate higher returns and increase long-term land value while preserving biodiversity**

Which will assist in:

- Making sustainable forestry as valuable as other competing land-use options, preventing forest land conversion and slowing the rapid rate of deforestation
- Attracting and channelling funding into sustainable forestry in the tropics and developing countries
- Establishing a value for ecosystem services worldwide and acting as a catalyst for change by engaging the private sector

## Multiple-Asset Approach for Forestry Companies

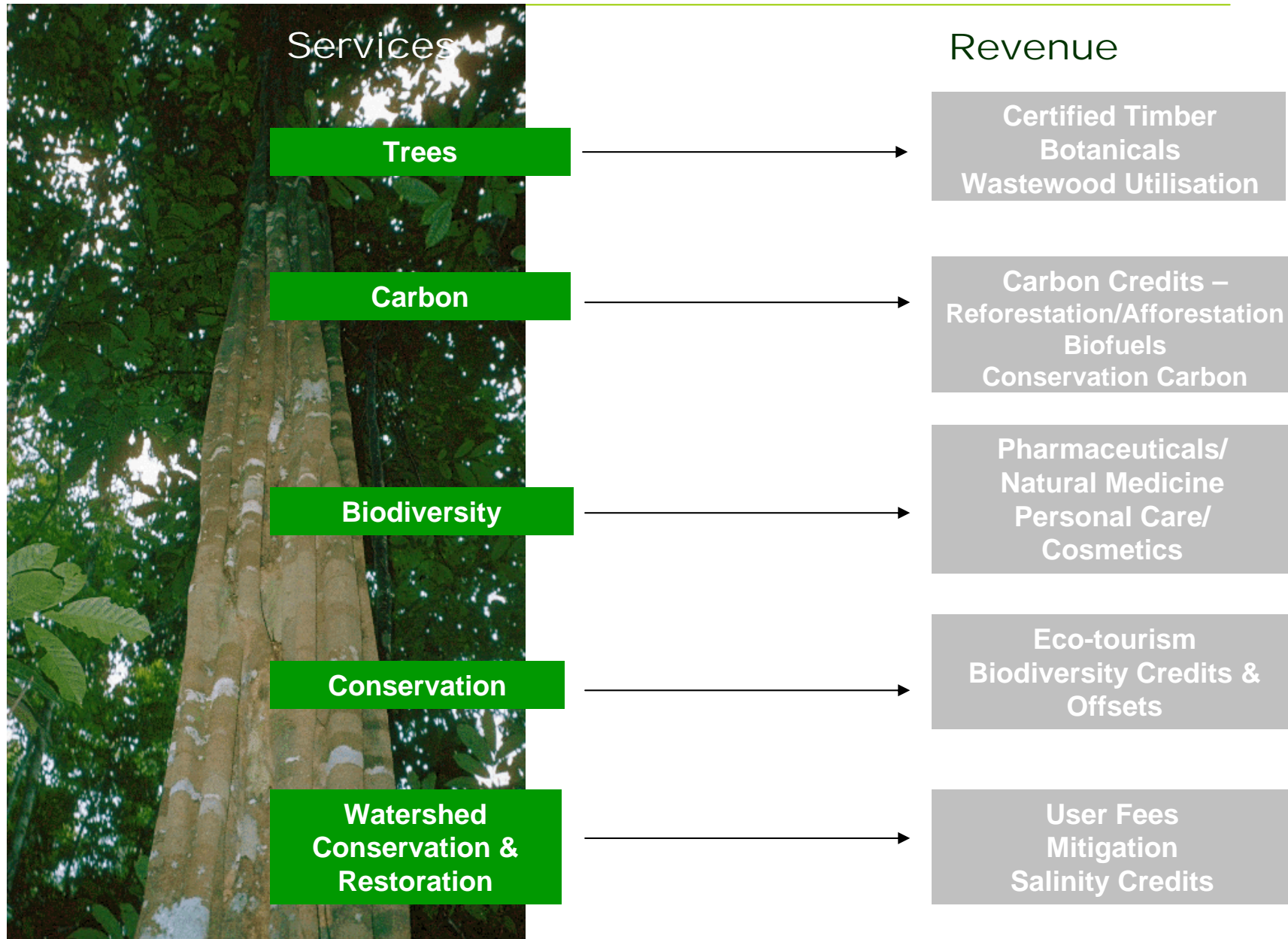


### Objectives;

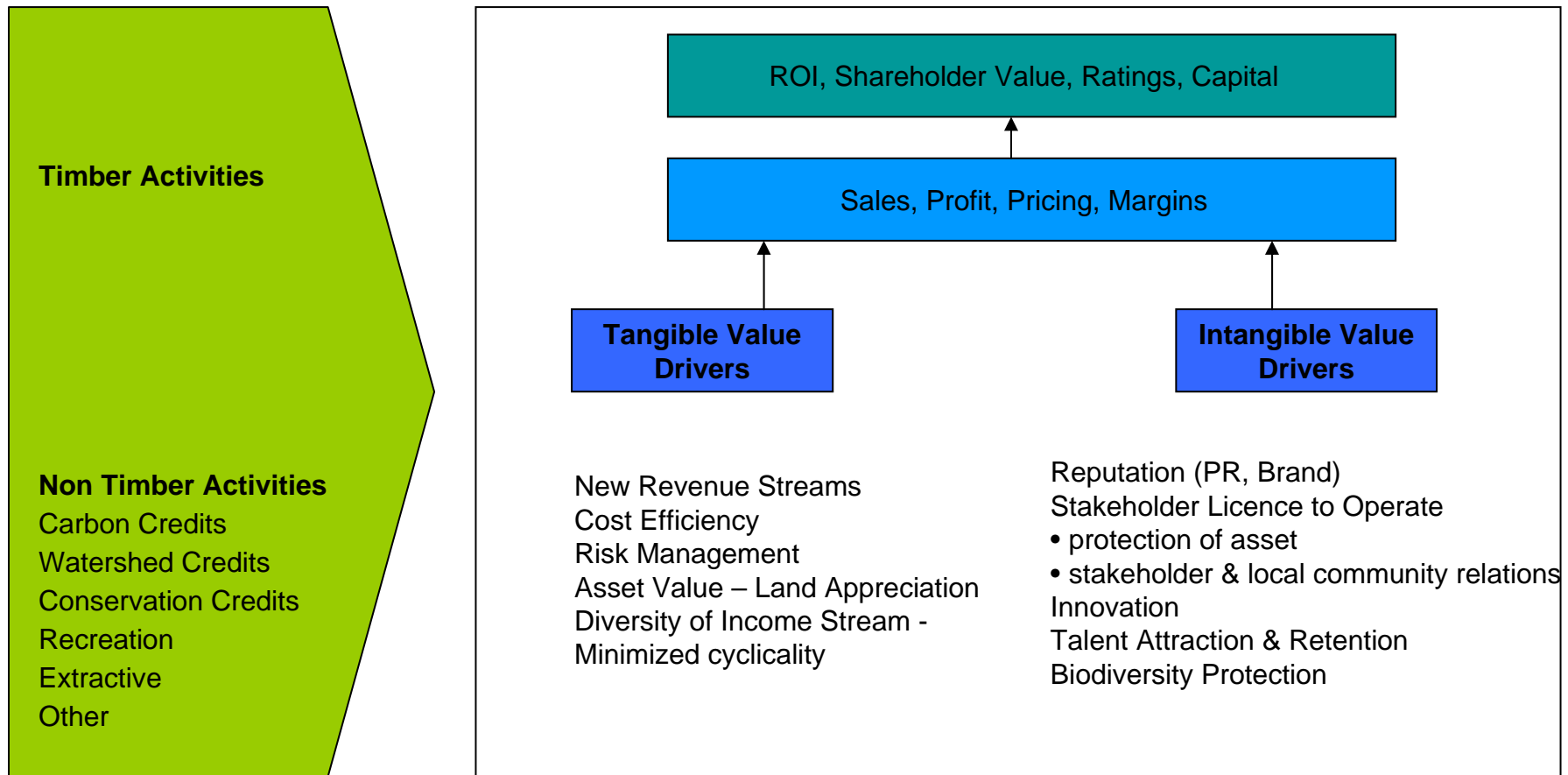
Increase the long-term steady state yield of the land asset;

- Increase yield per ha of productive timber land
- Generate value from conservation areas whilst preserving the integrity of these
- Generate value from non-productive (non conservation areas)

## Forest Ecosystems Services that Currently Generate Revenue



# Multiple-Asset Approach to Forestry Investments – the Business Case



## Two Projects at a Glance

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**The IFC EOF granted a performance based loan of \$250,000 to fund ecosystem services and non timber forest products development with two forest companies;**

### **Precious Woods Amazon, Brazil**

- FSC certified forest operator of tropical natural forest in the Amazon and Para, and plantations in Costa Rica and Nicaragua with 460,000+ hectares under management.
- First company in the Amazon to receive FSC certification & the only publicly quoted forestry company with FSC certification that operates in the tropics.
- Precious Woods has set ecological standards in tropical forestry and have received a number of environmental awards for its efforts.

### **Global Forest Products, South Africa**

- FSC certified forest products company in South Africa with 92,000 hectares of FSC-certified plantation and conservation areas.
- Leading producer of lumber and panel products on the African continent.
- Global Environment Fund-US, along with the Industrial Development Corporation of South Africa, formed the Company in 2001 to create a model triple-bottom line forest products company that could create value from the country's considerable forest resource base.

## Key Opportunities Identified and Developed

### Key Opportunities Identified

#### Precious Woods

Carbon - Biofuels  
Essential Oils - Botanicals  
Extraction  
Lesser Used Species  
Orchids – Sustainable Extraction



### Opportunities Selected/Business Plans Produced/Developed

Carbon – acquisition of energy  
plant, biofuels & methane  
avoidance.  
  
Botanicals Extraction on the entire  
asset (Amazon & Para.)

#### Global Forest Products

Grassland conservation &  
rehabilitation with Blue Swallow  
Biofuels/Energy plant – Carbon  
credits  
Tourism  
Wetland Rehabilitation  
Afforestation/enrichment planting of  
indigenous species - carbon &  
botanicals



Biofuels/Energy plant – Carbon  
credits, Wastewood optimisation.  
  
Sustainable tourism, recreation, &  
real estate development.



## Contribution to PW

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**The opportunities developed with the BDF will increase the revenues of Precious Woods' Amazon operation by more than 50% and triple their profits (PBIT) in 2006**

### **Benefits of the Biofuel Energy Generation/Carbon Credits Venture**

- Emissions reductions benefits of 156,000 tCO<sub>2</sub> per annum from fuel switch from diesel to wastewood and methane avoidance from using stockpiles and sawmill waste as fuel
- Revenue contribution from carbon credits of US\$ 1.5m plus per annum. Expected total revenue contribution to PW of US\$15m plus (2002-2012). Additional revenue contribution from renewable energy sales

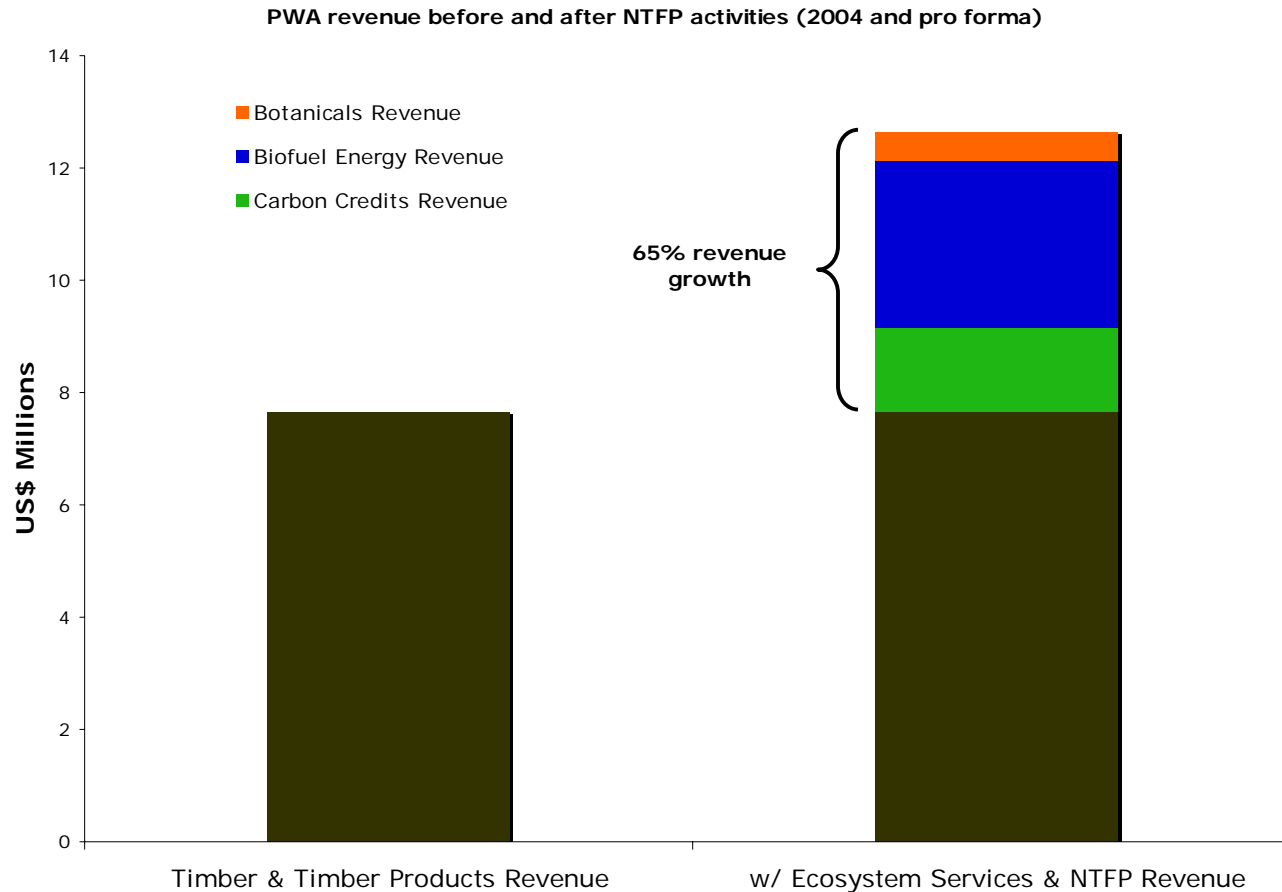
### **Potential Benefits of the Botanicals Venture**

- Potential to set up a botanicals business with projected revenue contribution of US\$ 500,000+ per annum (after 3-5 years)
- A community botanicals venture will provide employment opportunities in the area, include training in sustainable harvesting, and ultimately, reduce deforestation
- A successful venture has the opportunity to be replicated and will support growth of the global botanicals market

Sale of carbon credits and electricity is expected to increase PWA revenues by 50% in 2006 and treble their profits. Revenue and profit contribution from the sale of botanical material would further increase this

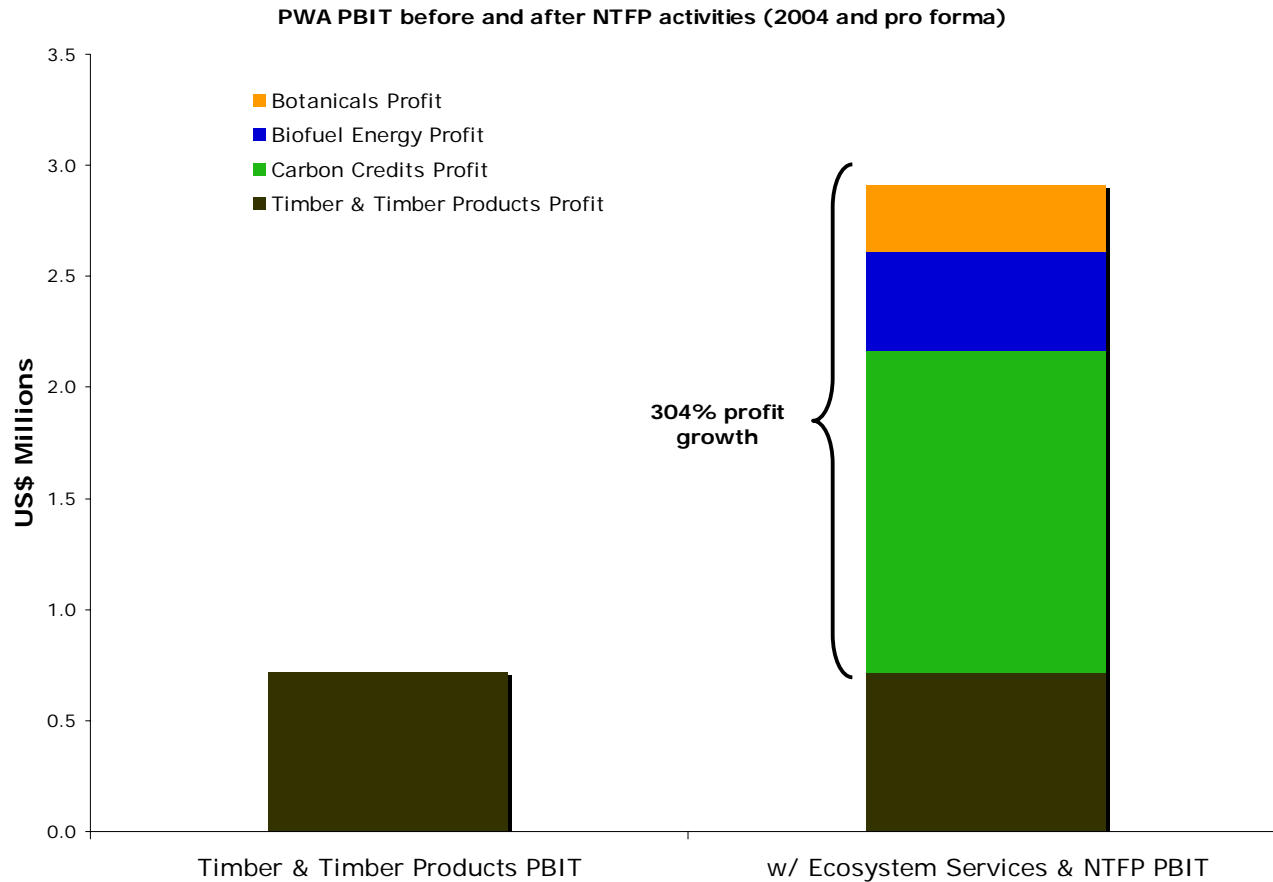


## PWA revenue before and after NTFP activities



Sale of carbon credits and electricity is expected to increase PWA revenues by more than 50% in 2006. The revenue growth is predominantly driven by the energy sales from the biofuel plant and carbon credits. Additional revenue contribution can also be materialized through the sale of botanical material.

# Precious Wood Amazon PBIT before and after NTFP activities



As most of the non-timber activities are high margin businesses, the diversification is resulting in a significant increase in PWA's profit (PBIT) of more than 300%, predominantly driven by the sale of carbon credits, but also supported by profit from the biofuel plant and botanicals

## Benefits of diversifying into Ecosystem Services and NTFPs for PWA

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- Revenue and profit growth and margin improvement
- Minimized cyclicalities through diversity of income streams – less reliance on cyclical timber markets and harvesting season fluctuations - harvestable species, rainy season, transport issues, licensing issues etc.
- Foreign currency carbon contracts
- Risk reduction – reduced reliance on timber markets and timber prices, wastewood utilisation (previous fire risk), local community/stakeholder engagement and remuneration
- Land appreciation – increase land value through diversified revenue streams and utilisation of non-productive timber areas
- Improved relationships with local stakeholders – communities involved in botanicals harvesting business, local inhabitants of Itacoatiara (town of 60,000 inhabitants) receive renewable energy – pollution and noise reduction
- Environmental benefits – emission reductions (fuel switch and methane avoidance as well as from avoided transport of diesel into the Amazon)



## The multiple asset approach – the new sustainable forestry model

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- Based on this initial case study, ecosystem services and NTFPs can have a significant impact on a forestry business
- We believe this is a future sustainable forestry model, taking sustainable forestry to the next level to a multiple resource use model
- This approach will also assist in financing/offsetting some of the costs of being certified
- And assist in poverty alleviation through engaging local communities in the ecosystem services and NTFP enterprises
- Forest Trends Business Development Facility is assembling a portfolio of projects to demonstrated the success of this model across geographic regions and forest types
- We encourage all forestry companies to look at the potential to diversify into these businesses

## Selection of BDF Pipeline projects 2006



	Forest Operator	Country	Project
1	Yawanawa Indigenous Community	Brazil, Amazon (Acre)	Improve community livelihoods through sustainable development of natural resources, in particular botanical species. Assist in developing commercial value from botanicals using indigenous knowledge, whilst protecting property rights and ensuring fair sharing. Assess the potential for other ecosystem & NTFP products and services including conservation carbon on 50,000 ha of land that is currently under logging threat
2	Global Forest Products/Local Communities	South Africa Mpumalanga	Re/Afforestation of degraded land (up to 5,000 ha) with indigenous species with high medicinal value for a GFP/community venture to extract botanicals. New reforestation model with multiple benefits and revenue streams – carbon, botanicals, other NTFPs, selective harvesting
3	AGROTEC/ small farmers	Goiias, Brazil	Improving livelihoods through herbal medicinal projects with small farmers using indigenous knowledge and creating a 'green pharmacy'
4	Precious Woods/ Communities	Brazil, Amazon	Sustainable botanicals extraction in the Amazon with community involvement
5	Global Solidarity Fund/Local communities	Mozambique Niassa	Assess and develop ecosystem services and products including; <ul style="list-style-type: none"> <li>• Reforestation/afforestation credits (plantation and conservation areas)</li> <li>• Options for wastewood utilisation/applications; biofuel energy generation/carbon credits, pellets, fertilizers, other</li> <li>• Bio-diesel opportunities from nuts</li> <li>• Biodiversity credits</li> </ul>
6	Global Solidarity Fund	Mozambique Sofala	Assess and develop ecosystem services and products including; <ul style="list-style-type: none"> <li>• Botanical harvesting</li> <li>• Biofuel energy generation/carbon credits</li> <li>• Possibly eco-tourism opportunities and carbon sequestration credits for fire prevention</li> </ul>
7	Global Forest Products	South Africa	Biodiversity real estate offset and methodology development in South Africa with GFP and a real-estate developer
8	TT Timber/CIB	Congo Brazzaville	Multiple asset approach assessing all ecosystem services opportunities, focusing on wastewood applications – biofuel, botanicals, other, conservation and reforestation
9	Global Forest Products	South Africa	Eco-tourism development – including ancient historic, archaeological and spiritual sites
10	Sierra Gorda Community	Mexico	New reforestation model with multiple benefits and revenue streams – carbon, botanicals, other NTFPs, selective harvesting

## The Business Development Facility – Contact Details

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## Pipeline Strategy

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- Develop 7-10 Additional Projects with a focus on southern and central Africa, tropical Latin America and South-East Asia; areas of highest biodiversity value and greatest threat to sustainable land management
- Continue to work with existing prototype partners for second phase
- Work with commercially viable forestry operations and well organised communities
- Encourage potential partners to seek FSC and / or SFM Certification
- Work with pipeline partners to secure projects;

### **PIPELINE PARTNERS**

- **Katoomba Group**
- **Smartwood / RA**
- **IUCN**
- **World Bank PCF/BCF**
- **Tropical Forest Trust**

## What the BDF brings to the table



### BDF Expertise and Function

#### Gap in Forest Operators' Expertise and Resources

Dedicated management resource

Skills – lack of ecosystem services & products knowledge

Knowledge & access to key commercial partners – local and international

Strategic integration to overall business

Ability to bring to board attention – ROI analysis

Access to capital

Contract and commercial negotiations

Access to local and international specialists and capacity building agencies

**Business Development and Strategy**

**Market and Product Knowledge**

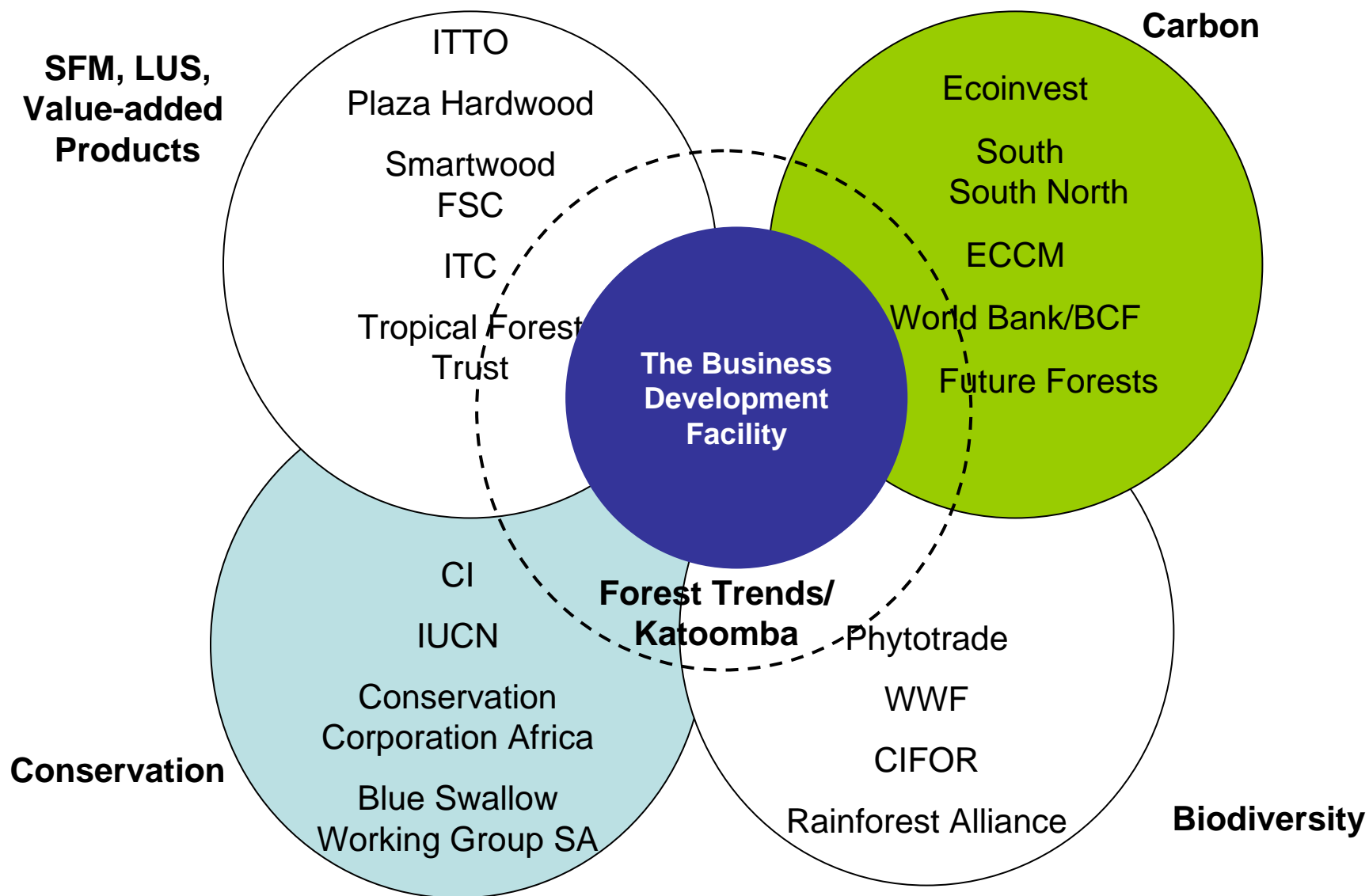
**Facilitation and Project Management**

**Finance and Negotiating**

**Partnership Building and Network**



## Expertise and Partners – Current projects



The Facility can tap into the expertise and network Forest Trends board:



Matt Arnold  
Partner, Sustainable Finance Ltd.,  
USA



David Brand  
New Forests Pty Limited  
Resource Group, Australia



James E. Brumm  
Mitsubishi International Corp., USA



Richard Burrett  
ABN AMRO, United Kingdom



David Cassells  
The Nature Conservancy,  
Australia



John Earhart  
Global Environment Fund  
Argentina



Randy Hayes  
Rainforest Action Network, USA



Michael Jenkins  
Forest Trends, USA



Catherine Mater  
Mater Engineering, USA



Miguel Milano  
O Boticário Foundation for Nature  
Protection, Brazil



Salleh Mohd Nor  
TropBio Research, Malaysia



Olof Johansson  
Sveaskog, Sweden



Martha "Pati" Ruiz Corzo  
Sierra Gorda Biosphere Research  
Mexico



Sergey Tsyplenkov  
Greenpeace Russia



Bettina von Hagen  
Ecotrust, USA

## ...and the Katoomba Group



### The Katoomba Group

Changjin Sun  
RCEEE, China

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Climate Change Capital

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New Forests Pty

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