Bamboo Based Bio-Economies
A Tool for Forest Landscape Restoration
Overview

EcoPlanet Bamboo was created with the following major purposes:

1. To provide an economically viable and time tangible solution to deforestation by meeting increasing global demand for timber and fiber based consumer products that currently rely on the harvesting of natural forests;

2. To overcome the investment barriers associated with traditional timber plantations, thereby tapping into new sources of financing for land use projects;

3. To convert degraded land back to economic productivity, while proving that business can be positive for both the environment and communities.
Reducing Deforestation: Bamboo as an Alternative Fiber for Timber Markets

EcoPlanet has pioneered the industrialization of bamboo – moving away from the traditional focus of bamboo as an NTFP and developing it as a viable alternative fiber for the 4 major industries that consume the majority of the world’s wood and fiber supply.
Framework 1: New Generation Plantations
Framework 2: Restoring Agricultural Land
Framework 3: Riparian Buffer Zones
Smallholder Plantings
Combining a Sustainable Resource Base with Clean Manufacturing

EcoPlanet Bamboo has worked internally and with technology partners to develop innovative technology for each major market sector that meets the following criteria:

• Environmentally clean
• Low footprint
• Applicable at small scale

While outputs focus on development of bamboo based products that are:
• Same technical specifications as products already on the market
• Same quality or better
• Same price as current products
Disrupting Existing Forest Based Supply Chains

Analysis of existing supply chains indicates how and where bamboo can feed in as an alternative raw resource or semi-processed product, allowing for an increase in domestic industry and facilitating green industrial growth.
Market Analysis Determines the Scale of Bamboo Restoration

10.1.1 Pulp and Paper

- Sanitary paper = 867ha
- Brown paper bags = 90ha

Total bamboo planted area: ~1,000 hectares

10.1.2 Engineered Timber

- Plywood = 304ha
- MDF = 520ha

Total bamboo planted area: ~1,000 hectares
Environmental & Socio-Economic Benefits

Bamboo has a number of ENVIRONMENTAL BENEFITS:

1. Positively contributes toward carbon sequestration and storage
2. Grows on degraded land
3. Erosion control
4. Restores organic soils
5. Creates permanent canopy cover
6. Stabilizes water tables
7. Biodiversity

A bamboo bio-economy creates both direct and indirect SOCIO-ECONOMIC BENEFITS.
Summary & Key Messages

1. The paradigm can be changed; forest industries can and should result in positive land use change rather than negative;
2. Being able to scale down in manufacturing & supply chains allows for a scaling up of inclusivity and a wider resource base of wood & fiber;
3. Countries can gain economic independence for key industries and product sectors while allowing for industrial development that is both economically beneficial & green;
4. Silvicultural knowledge, technical capacity and green technology are now available, finance remains the limiting factor for scaling up.