

# Catalyzing the forest-based industries' engagement in ecosystem restoration

## Background paper<sup>1</sup> for ACSFI Restoration Roundtable

### Introduction

Human activities have caused significant disruption to natural ecosystems. Functionalities of forests, freshwater systems, mountains, peatlands, and oceans have significantly deteriorated. **Ecosystem restoration** – the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed – is regarded as a key approach to avert catastrophic environmental consequences. Unsurprisingly, then, ecosystem restoration has emerged as a common thread among a wide range of multilateral initiatives, e.g., the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), and the Convention on Biological Diversity (CBD). Ecosystem restoration also forms a core facet of SDGs 14 and 15 (Life Below Water; Life on Land) and it closely aligns with SDG1 (No Poverty), SDG2 (Zero Hunger), SDG6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), and SDG13 (Climate Action).

“The UN Decade on Ecosystem Restoration (running from 2021 through 2030) is a rallying call for the protection and revival of ecosystems all around the world, for the benefit of people and nature. It aims to halt the degradation of ecosystems and restore them to achieve global goals. Only with healthy ecosystems can we enhance people’s livelihoods, counteract climate change, and stop the collapse of biodiversity. The United Nations General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries from all latitudes.

Led by the United Nations Environment Programme and the Food and Agriculture Organization of the United Nations, The UN Decade is building a strong, broad-based global movement to ramp up restoration and put the world on track for a sustainable future. That will include building political momentum for restoration as well as thousands of initiatives on the ground.” (UNDER website)

The social, political, and financial momentum around ecosystem restoration as a pathway to mitigate climate change and achieve multiple SDGs has grown in recent years and it was noticeable during the Climate Week (Sept 19-25, 2022) with affirmation from several prominent world leaders to support restoration efforts. For example, Germany announced an intention to increase financial support for restoration and biodiversity protection to 1.5 billion Euros annually. The greatest thrust to mobilize public and private sector resources to ecosystems restoration has, perhaps, come through the declaration of 2021-2030 as the United Nations Decade on Ecosystem Restoration (UNDER). This proclamation has both stimulated global action and reinforced regional restoration initiatives such as

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<sup>1</sup> The background paper summarizes findings contained in the draft paper prepared by FAO and ACSFI on “Engagement of forest-based industries in ecosystem restoration; Current status, challenges and opportunities” not yet published at the time of the Restoration Roundtable. The draft paper is based on a study conducted by Mr. Ludwig Liagre

the Bonn Challenge, the Initiative 20x20 in Latin America, AFR100 in Africa, ECCA30 in Eastern and Central Europe, and the Agadir Commitment for Mediterranean countries. Notably, the private sector contribution is critical for the success of all efforts to ecosystem restoration.

### **The unique role for forest-based industries in ecosystems restoration**

Forest-based industries can uniquely contribute to broader efforts to restore ecosystems, in particular through forest, grassland, and forest landscape restoration (FLR). The concept of FLR underlies some of the major commitments for restoration as it is “the ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes<sup>2</sup>.” Many forests sector companies have a long and variegated history of managing the complexities involved in restoration in different parts of the world and have, thus, developed scientific expertise on effective restoration approaches as well as a deep understanding of social, technical, political and economic challenges involved in implementing them. As such, they possess a unique set of learnings and knowledge that can be shared with companies both within the forest sector and beyond to ratchet up standards of and precision in the private sector’s efforts to restore ecosystems.

Moreover, globally, production forests represent 1.15 billion Hectares (Ha), which is more than 25% of the total forest area. Business entities alone manage more than 420 million Ha, representing greater than 10% of global forest areas (FRA, 2020). Thus, forest-based industries manage – either directly or indirectly through their value-chain partners – a significant land base over which restoration activities can be carried out.

*Owing to their rich knowledge base as well as the land area they manage, the forest-based industries are in a uniquely advantageous position to contribute to global efforts to restoring forest ecosystems. The purpose of this roundtable is to explore how the forest-based industries can collectively scale up the impact of their ecosystem restoration efforts and, in the process, what strategic benefits can they derive individually as well as collectively.*

### **Forest-based Industry Engagement**

The ACSFI secretariat of FAO recently commissioned an exploratory study<sup>3</sup> to develop a preliminary understanding about the forest industry’s engagement with ecosystem restoration. This study reveals that forestry companies participate in multiple alliances and partnerships – e.g., as the Coalition for Private Investment in Conservation (CPIC)<sup>4</sup>, Interlaken Group<sup>5</sup>, New Generation Plantation (NGP)<sup>6</sup>, the WBCSD’s Forest Solutions Group<sup>7</sup>, and the WEF/Tropical Forest Alliance – all of which include ecosystem restoration as a thematic focus.

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<sup>2</sup> [https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration#:~:text=Forest%20landscape%20restoration%20\(FLR\)%20is,deforested%20or%20degraded%20forest%20landscapes.](https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration#:~:text=Forest%20landscape%20restoration%20(FLR)%20is,deforested%20or%20degraded%20forest%20landscapes.)

<sup>3</sup> The study was conducted by Mr. Ludwig Liagre

<sup>4</sup> <http://cpicfinance.com/>

<sup>5</sup> [www.interlakengroup.org/](http://www.interlakengroup.org/)

<sup>6</sup> <https://newgenerationplantations.org/>

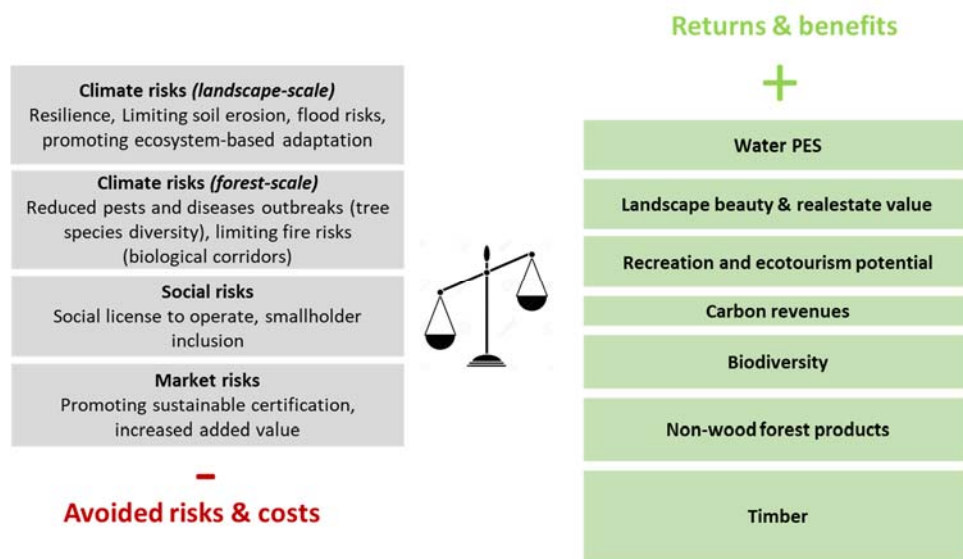
<sup>7</sup> <https://www.wbcds.org/Sector-Projects/Forest-Solutions-Group>



Forest Solutions Group (FSG), for instance, views the forest sector as essential to making “nature positive” economic progress that not only halts nature loss but, in fact, reverses it. The FSG framework comprises two intertwined core elements: sustainable management of working forests and the development of circular bio-economy (shown in the figure to the left<sup>8</sup>). Each underpins practices that enhance forest ecosystems.

The ACSFI study documents that ecosystems restoration has the potential to help forest-based industries in reducing a number of risks and reaping multiple benefits which are captured in the

following diagram:



While the risks that can be mitigated and benefits that can be derived from ecosystems restoration activities can vary based on the location and socio-economic contexts of companies as well as companies’ competitive capabilities, the ACSFI study draws on macro-level trends to suggest that potential benefits to the sector, as a whole, can be more concretely understood through the following four categories:

**1. Stable supply of sustainably harvested raw material**

The growing demand for forest-based products highlights the importance of forest and landscape restoration to ensure the long-term availability of raw materials. Forest-based bioeconomy is booming and the market for forest-based products is expected to grow from \$USD 535.96 billion in 2020 to \$USD

<sup>8</sup> <https://www.wbcds.org/Sector-Projects/Forest-Solutions-Group>

956.71 billion in 2030 at a CAGR of 5.7%<sup>9</sup>. Gresham House (2020) expects consumption of timber alone to rise by 3.1% per annum over the next 30 years. To fulfil this growing demand without creating pressure on natural forests necessitates effectively utilizing more than 2 billion hectares of land that is deemed to have the potential for restoration. The need to restore this land to grow required biomass is pressing in the wake of intensifying risks of wildfires and pest infestation, both of which are exacerbated by climate change.

## 2. Access to green finance and investment opportunities

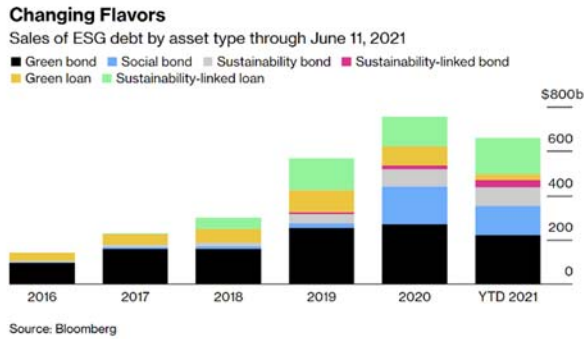
Restoration can indeed include plantation forestry if plantations are managed in compliance with broadly defined principles of sustainable forestry to derive a full range of benefits including provisions of ecosystem services. When established on degraded lands, plantations can aid in enhancing biodiversity<sup>10</sup>. A focus on restoration using a regenerative planting model can effectively reduce costs associated with sustainable forest certification, through the services provided by a more diverse ecosystem, e.g., natural pest control, water cycles, climate regulation.



Restoration activities can help forest-based industries to tap into emerging capital market investment opportunities through such measures as impact funds, green bonds, social bonds, sustainability bonds (SBs), sustainability-linked bonds (SLBs), green loans or sustainability-linked loans (SLLs). In addition, restoration activities can help companies gain access to novel finance opportunities through payment for ecosystem services, impact funds, and funds tied to CSR commitments. Figure on the left side summarizes the main currently available (or emerging) financing options. Notably, some of these financing mechanisms require a degree of financial expertise. It is, therefore, important to build the capacity of relevant stakeholders in cultivating and accessing green finance markets for restoration initiatives.

<sup>9</sup> <https://www.thebusinessresearchcompany.com/report/forestry-and-logging-products-market#:~:text=Forestry%20And%20Logging%20Market%20Size,at%20a%20rate%20of%206.3%25>.

<sup>10</sup> Bremer & Farley (2020). Does plantation forestry restore biodiversity or create green deserts? A synthesis of the effects of land-use transitions on plant species richness <https://link.springer.com/article/10.1007/s10531-010-9936-4>



A Bloomberg report (left Figure) shows that sales of all major green assets have been rising quickly and all reliable estimates suggest that these trends will only accelerate as the number of investors interested in ESG and climate responsible portfolios further increases. That said, how much of the green finance market can be realistically tapped into through restoration initiatives remains unclear. The exploratory study indeed shows that some forest sector companies

are active in this space and successfully accessing green finance options.

### 3. Meeting sustainability goals

Ecosystem restoration can aid forest-based industries in achieving a variety of social and environmental goals. 137 out of 165 Nationally Determined Contributions (NDCs) recognize forests as a key sector and more countries are developing and adopting national REDD+ strategies (WWF, 2020). These strategies represent conducive frameworks for the development of natural climate solutions by forest-based industries in particular to achieve net-zero emission targets through CO<sub>2</sub> removal. Additionally, restoration activities may generate employment opportunities and alleviate rural poverty.

Achieving social and environmental goals through restoration activities could be opportune to reorient the sustainability messaging of the forest-sector, that has long been subjected to skepticism and accusation of greenwashing by some groups. Specifically, restoration can facilitate anchoring the sustainability messaging of the forest-industry in the *regenerative economy* narrative. This framing could strengthen the environmental reputation of forest-based industries and could be an effective strategy to assuage those who, in criticizing the industry, choose to disregard its inherently regenerative nature.

### 4. Creating New Business Opportunities

Engaging in ecosystem restoration also has the potential for market diversification through novel wood and non-wood forest products. On the wood side, premium quality wood products could be developed particularly when restoration involves growing native species (Zastocki & al, 2021). Restoration may also allow companies to offer non-wood forest products, e.g., wild edible, medicinal, and aromatic plants. Markets for such novel products are often smaller and less organized than wood products markets and so companies may need to develop entirely new business models and marketing capabilities.

In addition, companies may enter PES markets. The exploratory study shows that handsome revenues can be raised through carbon sequestration, particularly as carbon markets mature and become more lucrative. Other possibilities include revenue generation through recreation although complexities exist in managing forestlands to both harvest timber and derive non-timber products and services.

In closing, ecosystems restoration is an emerging megatrend that offers forest-based industries numerous opportunities to leverage their unique knowledge base and utilize their area to advance societal interests as well as their own. Many forest sector companies are already active in this realm but to gain the most out of this opportunity perhaps entails collective and concerted efforts to both scale up ongoing efforts and compellingly tell the ecosystem restoration story of forest-based industries.