Through timber construction, there is a future in which forests can support cities and, in return, cities can support forests. As the global population increases, particularly in cities, the construction sector is expected to exponentially grow in order to accommodate the demand for housing and other infrastructure. Current construction techniques are a significant contributor to the global climate crisis and urgently need to be transformed. By substituting the carbon-intensive materials commonly used in construction with forest economy biomaterials, such as wood and bamboo which sequester carbon, we can create buildings with reduced carbon emissions. However, this timber construction industry is still in its nascency and there is a need to address its market gaps and leverage opportunities to accelerate its development and increase its uptake.

These interventions for the mass timber construction industry can be segmented into seven main categories of solutions that affect the value chain and enablers of the ecosystem. Through various internal and external discussions, Climate Smart Forest Economy Program (CSFEP) has categorized potential solutions as relating to i) Finance and insurance; ii) Product and process certifications; iii) Communication and awareness building; iv) Timber knowledge ecosystem; v) Forest management and timber policies; vi) Value chain linkages; and vii) Timber-based real estate. The proposed solutions can be executed as for-profit, philanthropic, or blended ventures, with the services developed as individual offerings or paired with complementary services in a single offering. Additionally, while some solutions may be set up as a free-standing entity, other solutions may be similar to services provided by existing actors in or adjacent to the CSFE sector. In the case of the latter, it may make sense to approach these existing providers as potential partners to find a suitable and effective home for needed services.

FINANCE AND INSURANCE

Insurance for the mass timber, and larger climate-smart forest economy (CSFE), is not yet well developed. Forest economy producers lack access to forest- and tree-plantation-specific insurance products tailored to their needs, including specific risks (such as fire) and tree-maturation timelines. Additionally, timber construction actors face challenges accessing affordable insurance products for wood-based buildings.

Creating a firm to provide CSFE insurance products and policies would enable forest economy and timber construction actors to access bespoke insurance products at affordable rates. The firm would aim to:

- Reduce the risk in the production and processing of wood-based end-products to make these more attractive endeavors for a wider variety of actors
- Reduce the barriers to building with wood-based products

There are challenges perceived by major insurance authorities when considering both builder’s risk insurance (or course of construction) and property insurance (after the building is complete and occupied) that hinder the industry’s development of mass timber insurance products. This is namely concerning fire safety and water exposure, as well as structural risks they believe have not been adequately tested. However, actors in the mass timber construction industry argue that many of these concerns are alleviated by a hybrid approach to timber construction. As this debate ensues, there is a need for pioneers in the insurance industry to test and align on how best the insurance industry’s tolerance for risk and the building practices used in mass timber construction could reach an equilibrium. And other aspects of the value chain such as tree-growing and carbon storage also require unique solutions and coalition between the two industries.
In order to meet its objectives, the firm would need to develop and bring to market at least three new or adapted insurance products:

1. Tree-specific crop insurance, tailored to the needs of forest- and plantation-based managers and producers
2. An insurance offering (or a suite of offerings) covering the specific needs of timber construction projects. Individual offerings could be developed for commercial and residential timber construction. This would likely require liaising with regulatory authorities to include timber-based buildings in their authorizations and then supporting insurance companies with compliance.
3. An insurance offering that guards against potential carbon release from a pool of credits, reducing or eliminating the need for buffers in high-quality credits

If you would like to know more about similar business models for specialized industry insurance, you can reach out to Chubb Insurance.