

Data collection and analysis service

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.

TIMBER KNOWLEDGE ECOSYSTEM

Overall, the mass timber, and larger climate smart forest economy (CSFE), industries lack a source of wide-ranging data and analyses that can be leveraged to further the development of the market. Actors across the CSFE value chain have limited historical data available to them, and limited capacity and capability to collect and analyze data themselves. There is scarce data available to drive the different aspects of decision-making for these actors. The industry needs a platform to collect and publish relevant data, not only for ecosystem actors, but also for interested parties such as policy-makers and investors.

A data collection and analysis service would support CSFE businesses in collecting and analyzing data about their environment, their operations, and their community. This would improve decision-making for efficient practices and effective implementation of safeguards. The service provider would aim to:

- Increase the amount of data on CSFE businesses and practices
- Supplement satellite and global-level data with data available on the understory and at the smallholder farmer level
- Improve the quality of information available to make key decisions for the business and the sector
- Improve the efficiency of operations
- Improve the efficacy of safeguards

There are global organizations already partially fulfilling this role for the CSFE. For example, the Global Forest Watch Pro is a tool designed to help CSFE actors manage deforestation risk in their supply chains using geospatial data for forest and land monitoring. The platform is able to assist a range of stakeholders, including bankers, producers, commodity traders, and manufacturers. The services it performs include helping users discover compliance-related forest insights to assess risks, monitoring production areas for forest clearing or fire activity, flagging production areas with concerning forest clearance, and identifying

priority areas in the supply chain to adhere to zero-deforestation commitments.¹ Similarly, Restor has a platform where users are able to assess the restoration potential for any area around the globe, gaining insights on local biodiversity, Current and potential soil carbon, and other variables like land cover patterns, soil pH, and annual rainfall.² Although these examples are aimed at forestry activities, there is an opportunity to identify similar opportunities for data-driven decision-making across CSFE value chains.

The proposed data collection and analysis service provider could offer the following services:

- Provide team and resources for traditional and innovative methods of quantitative and qualitative data collection (e.g. surveys, interviews, location mapping with drones etc.)
- Provide guidance on how to analyze data from available existing data sets, for example, from satellite imaging
- Analyze data and offer insights for operations and safeguards – a different business models could allow for proprietary or shared access to insights
- Provide training and capacity-building for data collection and analysis

If you would like to know more about CSFE data collection and analysis, you can reach out to [Forest Watch Pro](#) and [Restor](#).

¹ Global Forest Watch website, accessed 2022

² Restor website, accessed: 2022