Crimson Publishers
Wings to the Research

Opinion

# A Brief Reflection and Perspectives on the Management of Natural Forests in the Brazilian Amazon and Public Policies

**Jorge A G Yared*, Marco A Siviero, Sabrina B Vieira and Agust Sales**

Department of Research and Innovation, Grupo Arboris, Brazil

**ISSN: 2770-6745**


***Corresponding author:** Jorge A G Yared, Grupo Arboris, Rua Gonçalves Dias, 919, Dom Eliseu, Pará, Brazil

**Submission:** January 30, 2024
**Published:** February 06, 2024

Volume 4 - Issue 4

**How to cite this article:** Jorge A G Yared*, Marco A Siviero, Sabrina B Vieira and Agust Sales. A Brief Reflection and Perspectives on the Management of Natural Forests in the Brazilian Amazon and Public Policies. Biodiversity Online J. 4(4). BOJ. 000591. 2024.
DOI: 10.31031/BOJ.2024.04.000591



## Opinion

Timber industry is still one of the main economic segments in the Amazon Region, in its various stages of the production process. Its historical evolution is remarkable in two aspects: firstly, timber industry is recognized for its importance in regional socio-economic dynamics, generating employment and income, and driving a growing economy that goes beyond the limits of regional and national markets. This has been a positive response to the strong demand for tropical timber internally and internationally. Secondly, wood production has been identified as one of the main economic segments responsible for environmental degradation, either in isolation or in conjunction with other land use activities. The process of selective logging has been prevalent for a long time, even before the implementation of regulations from 2006 [1], supplying the timber industries within a logic in which the source of natural resources was abundant and unlimited, without concern for the business sustainability. Most of the industries, especially the sawmills, operated on nomadic system, advancing with pioneering fronts into forest areas that were not always regularized, as resources became scarce in the areas of older occupation. Growing concern about environmental issues has led the markets, especially international ones, and the national government to adopt stricter procedures in relation to activities that degrade the environment. Although these actions seem to imply penalties for the timber sector, they have generated new opportunities for more established businesses. On the other hand, it has led to the need for adaptations and innovations in both natural forest management and industrial activities [2,3].

In recent years, progress towards a new and different role for the timber industry has begun to take shape. The creation and expansion of conservation units, regardless of their category, marks the presence of public authorities, inhibits the illegal appropriation of forest resources and opens up new opportunities for the secure and permanent supply of timber companies, based on sustainable management practices. The organization of the process of managing public forests for sustainable use functions as a catalytic instrument, acting favorably and preventively to strengthen timber activity [4]. Public forest concessions are excellent opportunities for implementing natural forest management, as they bring together and centralize wood production in specific areas, facilitating intra- and inter-sectoral public policy actions and resulting in added value to the production chain through the transformation raw materials into various forms of timber products. Public forest concessions, on their own, are not sufficient to meet the growing market demand for tropical woods. Private forests, whether in the form of Legal Reserves or not present excellent opportunities to complement the wood production from public forests [5]. However, the current regulations are not suitable for managing private forests. One of the reasons for this private forests, especially

in the eastern part of the Brazilian Amazon, are in their second or subsequent cycles of selective logging. At this point, it is worth expanding the discussion on the regulation of forest management, including species, minimum cutting diameters, cutting intensity in volume and cutting cycles. The principle of the current regulations only considers the selective cutting of trees with a diameter over 50 cm. In a way, this process is logical since the machinery and equipment used in tropical forests are technologically adapted to harvesting and processing large trees. Therefore, there is greater pressure on certain groups of commercial species, which typically occupy the forest canopy and cause greater impacts on the populations of a small number of species, a fact that has been repeated in public forest concessions [6]. From the perspective of technological innovation, it is necessary to alter both silvicultural norms and harvesting procedures, as well as the technology used for species utilization. In forest management planning, the number of species to be harvested should be increased, with the inclusion of new species that biologically do not reach large diameters and have become accepted by the market. This will contribute to making forest management more flexible and reduce pressure on the population of a small number of species currently used. The inclusion of smaller diameter species requires adaptations in equipment and machinery to reduce log extraction costs, as well as industrial equipment that operates with smaller diameters, both in the timber industry and sawmills.

Another challenge is to promote the integration and focusing of public policies at various levels, seeking to strengthen the management of natural forests and the industrial sector. The first question is to understand the role of natural forest management, in other words, whether management is seen as a forest development policy, an environmental policy, or both? It is certainly difficult to dissociate forests from the environmental context. Considering that the perception of this dichotomy is not very clear, its implications can either towards to one side and to the other. Although it is possible to understand them independently, they are certainly closely interconnected. Forestry development policy encourages and fosters the economic growth of forest-based production chains, while observing the integrity of forest resources, whereas environmental policy tends to operate towards of command and control [7]. The environmental licensing and monitoring of forest management projects are carried out by the state environmental agencies, following defined rules and procedures. The analysis of projects takes into account the possible risks of environmental impacts on the forest ecosystem and the actions that must be considered to mitigate them. This is intrinsic to environmental policy. Forest concessions represent a step forward in the context of both environmental and forestry policy and should not be limited to legalizing access to forest resources and controlling timber from the concession areas. Promotion local wood processing, incentivizing the valorization of forest products and services, as well as industrial diversification, technological development, and the utilization and training of local entrepreneurs and the regional labor, fit perfectly within a forestry development policy. Finally, an important step is the definition and implementation of policies to stimulate and encourage the modernization and diversification of the timber industrial park and of machinery and equipment for forest exploitation, in other words, an industrial policy aimed at the forest-based sector specific to the Brazilian Amazon. Wood transformation processes that generate waste and are inefficient need to be replaced by innovative processes. In addition, there is a need to add value to the wood produced by promoting incentives for the sawmill, laminate and plywood, furniture, and artifacts industries, as well as the transformation of wood fiber products such as Medium Density Fiberboard (MDF), Medium Density Particleboard (MDP), briquetting, and transformation into other wood objects, among others. In the near future, technologies are expected to become available for obtaining biofuels and bioproducts from forest biomass.

## Rererences

1. Brasil (2009) National environmental council. Resolution, No: 406.
2. Frank M, Britaldo SF, Daniel N, Gregory A, Hermann R (2009) Balancing conservation and economic sustainability: The future of the Amazon timber industry. Environmental Management 43(6): 941-950.
3. Vieira IC, Silva JM, Toledo PM (2005) Forest management in Amazonia: The need for new criteria in evaluating development options. Ecology and Society 10(1): 1-15.
4. Brasil (2006) Law No. 11,284, of March 2, 2006. Official Gazette of the Union. Brazil.
5. Brasil (2012) Law No. 12,651, of May 25, 2012. Official Gazette of the Union. Brazil.
6. Siviero, MA, Ruschel AR, Yared JAG, de Aguiar OJR, Pereira PCG, et al. (2020) Harvesting criteria application as a technical and financial alternative for management of degraded tropical forests: A case study from brazilian amazon. Diversity 12: 373.
7. Assunção J, Gandour C, Rocha R (2012) Deforestation slowdown in the Brazilian Amazon: Prices or policies? Environment and Development Economics 17(2): 133-160.