

Chapter 19

A Bioeconomy–Driven Special Economic Zone in the Amazon Region

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ABSTRACT

The Amazon has been an object of attention all over the world for its rich nature, with around 15% of all the biodiversity, such as 20% of the existing fresh water and thousands of species and also because of the threat to all this wealth that has become a highlight in the global press, due to complex causes, followed by the scenario of low socio-economic development. This research aims at the hypothetical evaluation of a Special Economic Zone (SEZ) focused on bioeconomy in the Amazon and relies on the link between social and economic results, the great potential for economic development based on the sustainable use of its biome and on the creation of SEZ as a development strategy. This research uses as methodology qualitative and inductive analysis of secondary data from international development promotion institutions and relevant studies on the topic and primary collected information from public entities. Therefore, it demonstrates motivations and points of attention for the proposal, including comparisons with development policies currently adopted in the Legal Amazon.

INTRODUCTION

The Amazon forest has some surprising numbers: we are talking about more than 7 million square kilometers (RAISG, 2020), which would be sufficient to cover more than 18 times the entire area of Japan; it houses about 15% of all known terrestrial and aquatic species on the planet; it has 25,000 km of navigable rivers and extends for 6 countries: Brazil, Peru, Bolivia, Ecuador, Colombia, Venezuela (figure 1). There are more than 46 thousand species of plants and at least 116 thousand species of animals. If it were a country, it would be the seventh largest in the world, not only one of the largest but also one with an exuberant nature. Among its unique natural resources, the Amazon has one third of the world's tropical woods, it is estimated at least 60 billion cubic meters; it has 20% of fresh water and 40%

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Figure 1. Extension of the Amazon Rainforest per country.

Note: provides the proportions of the biome held in each country showing it reaches 9 different territories in the south american what could be a potentiality to the whole continent, although the privilege of Brazil in holding almost 2/3 of the forest. From “Amazonía Bajo Presión”, by RAISG, 2020, p. 09

CUADRO 1. EXTENSIÓN DE LA AMAZONÍA EN LOS DIFERENTES PAÍSES Y PROPORCIÓN OCUPADA EN LOS TERRITORIOS NACIONALES

País	Bolivia	Brasil	Colombia	Ecuador	Guyana	Guyane Française	Perú	Suriname	Venezuela	Amazonía
área amazónica del país (km²)	714.834	5.238.589	506.181	132.292	211.157	84.226	966.190	146.523	470.219	8.470.209
% de la Amazonia en el país	8,4%	61,8%	6,0%	1,6%	2,5%	1,0%	11,4%	1,7%	5,6%	100,0%

of tropical forests in the world, according to the Institute of Man and the Environment of the Amazon, an institution dedicated to research and to preserve the Amazon (2013). As an example of its exuberant biodiversity, there are recent studies demonstrating that in a single tree in the Amazon, it is possible to find more species of ants than in the whole United Kingdom and that in a single environmental park in Peru there are 3 times more species of butterflies than across the whole Europe (Vaugahn, 2015).

Another number that causes impact: one single tree in the Amazon is capable of transpiring, per day, more than 300 liters of water (twice as much as an average Brazilian uses). With its estimated 390 billion trees (Steege et al., 2013), the region can launch more water into the atmosphere daily than the world largest watershed (which is also in the Amazon). According to a 2007 project, Flying Rivers (carried out by various institutions, such as the National Institute for Research in the Amazon – INPA) this volume of water is responsible, for example, for guaranteeing humidity for the entire southern region of Latin America, contributing to the volume of rainfall that benefits agricultural production in those areas (Expedição Rios Voadores, n.d.). According to data from Marcos Pivetta’s article, published in 2019 by the Brazilian newspaper Nexo, the Amazon rainforest stores the equivalent of 10 years of global carbon dioxide emissions (Pivetta, 2019). Not least important is the socio-cultural presence in the region, at least 410 indigenous tribes live in the forest. The empirical knowledge carried over generations on the sustainable use of forest assets had allowed a huge population. The television documentary series Arqueologias (Cultura Channel) points out that well before the arrival of Europeans in the region, the Amazon came to house about 10 million people (Azoury, 2017), almost the entire population of London.

If on one hand there is a great socio-biodiversity in the region, on the other hand there is the total lack of protection for one of humanity’s greatest environmental assets. It is alarming how only in November 2020 484km² have been deforested, the equivalent to 4.5 times the area of Paris (Imazon, 2020).

It is estimated that nearly 20% of Amazon’s primary vegetation cover has already been lost and that forest degradation is about to become irreversible. The two largest states in Brazilian Amazon, Pará and Amazonas, have more than 200 municipalities and none of them appears among the 500 Best country’s municipalities considering the HDI. However, in Brazil’s 100 Worst HDI list, 31 municipalities are either from Pará or Amazonas, including 6 cities among the worst 10 and also the worst of all, being Melgaço City (PA), with the HDI of 0.418 (UNDP, 2010). Such an imbalance also appears in the Legal Amazon economic collaboration to Brazilian production. Despite occupying 61% of the national territory, it represented only 8.6% of the country’s GDP in 2017. (IBGE, 2018).

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