

NATIONAL CENSUS OF BIODIVERSITY INTEGRATING ECOSYSTEMS AND SUSTAINABLE TERRITORIES: FOCUS ON SOCIAL AND NATURAL CAPITAL

Theme: Biodiversity conservation indicators

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One of the major challenges in the modern world is how to maintain the natural assets of the Earth and at the same time promote socio-economic development. Scientific research has demonstrated that the traditional development model is non-sustainable. Investments in human and social capital are the most critical elements to change a development paradigm in most of tropical countries.

Brazil is one of the richest countries in terms of number of biological species and diversity of tropical and sub-tropical ecosystems. Such prominent condition poses the Brazilian society with an important role in terms of global environmental policies dealing with biological conservation and global change. Due to the special conditions of extensive arable soils and favorable climate seasonality a great array of agricultural activities have dominated the rural economy in the last five centuries, since first arrival of Europeans into the continent. Such land-use and cultural patterns inflicted strong modification of natural areas into agricultural landscapes, pressuring savanna and tropical forest habitats through land conversion in different regions of the Brazilian territory. Despite sizeable efforts in conservation policies, monitoring of deforestation and land degradation, land demarcation for indigenous territories, and a solid scientific community dealing with different biodiversity aspects, there are still plenty of space for government actions to improve social awareness and value of this great natural heritage.

The concept of sustainable territories under a zero deforestation target has been proposed by academics for the Amazon Region, and slowly has been percolating into public policies in recent years. In response to the ongoing biodiversity worldwide crisis, and in addition to such viable and innovative development strategy proposal focused for regional economies inserted in well-preserved ecosystems, there is a current and urgent need for official numbers of biodiversity status for Brazil. In this sense, the authors propose an Official Brazilian Census of Biodiversity, in similar means as the current national social-demographic statistics program which has shown to be useful for different studies and development policies. Such endeavor should be multi-institutional, inter-disciplinary and constructed under a well synchronized system of data collecting, open-source communication policy, and with the definition of feasible targets and solid information verification system.

Concerted efforts under paramount challenges have shown to be successful in several programs of the academic world. Biodiversity has been a unifying theme of different societies and cultures. Monitoring and inventory of Brazilian Biodiversity should be a priority for Governments and of prime societal interest.