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White Paper

A critical analysis of the Native Vegetation Protection Law of Brazil (2012): updates and ongoing initiatives



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ABSTRACT

The Native Vegetation Protection Law of Brazil, which replaced the Forest Code from 1965, is still undergoing regulation at federal and state levels, and the constitutionality of some clauses are still in question. In order to support legal rulings, decisions by public officers, and to inform other stakeholders, we present a balanced assessment of the positive and negative consequences of Native Vegetation Protection Law in light of current scientific knowledge. Key advances were noted in the systems of controls and incentives, which promoted new mechanisms and policies to support the implementation of this law. The main environmental setbacks were (i) the removal of protection of certain environmentally fragile areas, (ii) the concession of amnesty of fines incurred for violating the preceding legislation, (iii) allowing continuous farming or maintenance of infrastructure in areas protected by law, without full recovery of native vegetation. The weakening of Native Vegetation Protection Law may hamper soil and watershed protection, biodiversity conservation, and even agricultural productivity, without manifest benefits for the country. On that account, we recommend that: (i) judiciary rulings and state and county regulations to correct pending issues with the Native Vegetation Protection Law based on scientific knowledge and with wider citizen participation; (ii) the strengthening of agencies for rural technical assistance; (iii) the development of incentives to develop the supply chain for native vegetation recovery; (iv) the regulation of compensation for Legal Reserves based on clear and robust environmental criteria; and (v) the assessment of legal compliance has also to be based on the environmental quality of recovered areas.

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Introduction

Almost four years ago the new norms that regulate the exploration, conservation and recovery of native vegetation in Brazil came into force, after a 13-year debate in the National Congress. These norms are defined in Law n° 12,651, sanctioned, with some vetoes, on May 25, 2012, by the President of the Republic, Dilma Rouseff, and altered by Law n° 12,727 from October 17, 2012. The current law, formally entitled Native Vegetation Protection Law (NVPL – Lei de Proteção da Vegetação Nativa, in Portuguese), is popularly known as the New Forest Code. However, the latter denomination is inadequate since it is not a code (i.e. a set of legal instruments referring to a specific juridical field, such as the Penal Code) and it does not comprise only forests. This law encompasses any and all native terrestrial ecosystems, including grasslands, shrublands, and savannas.

The NVPL defines the proportion of a given rural property that can be used for agriculture, silviculture or cattle ranching, as well as the area of native vegetation that must be maintained under protection or restricted use. It also defines situations in which landowners and landholders are required to recover natural vegetation on their land. Compliance with the NVPL is key for the preservation of what is left of the Brazilian flora, fauna and water resources: 53% of all remaining native vegetation in the country is located in private rural properties, rather than Protected Areas (Soares-Filho et al., 2014); in the Atlantic Forest, the most degraded biome in the country, where more than 60% of the Brazilian population live, this proportion reaches 90% (Ribeiro et al., 2009). The implementation of the NVPL is also essential to recover native vegetation remnants that have been eliminated from environmentally important areas in rural properties and, thus, ensure the provision of environmental services in each ecosystem, such as water for agriculture and human consumption, and the buffering of climatic variation. Such services are indispensable for the development of agriculture as well as for the well-being and safety of human populations who live in urban or rural areas.

Although the NVPL is in force since 2012, the regulation of some of its provisions will be effected at the state level. The pending ruling on the constitutionality of some provisions of this law by the Supreme Federal Court may also lead to significant changes that can both increase the rigor of the law for those that suppressed more native vegetation than was allowed in the past, and increase the demands regarding the recovery of preservation set-asides in rural properties. In the final section of this text, we evaluate some of the current actions that may modify the NVPL and show guidelines that could – in the authors' views – redirect the environmental legislation to attain its most important objectives with greater effectiveness and less ambiguity.

After the enactment of the NVPL in 2012, further discussion on the controversial aspects of this law were considered to be irrelevant and futile in the public eye, and even by many professionals and researches. Our understanding is the exact reverse. It is necessary to resume the technical and scientific debate of the NVPL, especially on its more polemic and ambivalent aspects, in order to provide guidelines for future



Environmental Services

Also called ecosystem services, these are benefits to human well-being resulted from multiple goods generated by natural ecosystems and processes they maintain, such as water purification, soil protection, and biological control of pests in agriculture. If native ecosystems are destroyed or degraded, part of these services may no longer be provisioned, resulting in, among other things, water shortage in cities, large landslides in urban regions, and yield losses in agriculture caused by pests. Recovering of natural ecosystems allows to partially reestablishing their services in historically degraded regions, were most of Brazil's population lives, contributing to economic development and human well-being.

Fig. 1 – Environmental services – definition and implications for the Native Vegetation Protection Law.

decisions on regulations at the state level, and for possible rulings and adjustments by the Supreme Court. Regulation by states has already started without such guidelines, as well as enforcement of the NVPL by the Federal Government (Lima et al., 2014). The Brazilian scientific community must contribute to this discussion with a critical evaluation (Loyola and Bini, 2015), based on the positive and negative consequences that the enforcement of this new law could entail for agricultural production, biodiversity conservation, and the provisioning of environmental services (Fig. 1).

The present text is a White Paper produced by authors invited by the Brazilian Association of Ecological Science and Conservation (ABECO). A "White Paper" is an official document, usually published by a government, institution or international organization with the purpose of informing society about an important topic of discussion and providing guidelines on how to approach its associated problems, thus helping readers to form their own opinion or to make decisions. The present White Paper aims at offering a balanced analysis, in light of the current scientific knowledge and the practical experience of scientists who have been working on relevant aspects extensively for years, of the positive and negative consequences that may ensue from the implementation of the new environmental legislation.

Previous versions of the NVPL

The regulation of the exploration, conservation and recovery of native vegetation was initiated in 1934 with the first Brazilian FC (Federal Decree #23793 of 1934). This decree had the objective to mitigate the unruled expansion of agriculture over native vegetation in areas of great environmental importance, such as riverbanks and fountainheads (Fig. 2). Thirty years later, Federal Law # 4471 of 1965 created a more effective and objective version of the original FC, with clearer criteria for the conservation and rational use of native vegetation in rural landholdings. For example, the location and dimensions of Areas of Permanent Protection (APPs) were first determined and, in the case of water courses, varied according to their width. Besides the 1965 FC, three other Federal laws, still in force, complemented the Brazilian environmental legislation:

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