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# Loosening of environmental licensing threatens Brazilian biodiversity and sustainability

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## Abstract

*Environmental licensing is one of Brazil's main environmental-policy instruments and is intended to regulate anthropogenic activities and to avoid their impacts on the environment. This licensing is now at risk of being annihilated. Bill 3729/2004 was recently approved by Brazil's Chamber of Deputies, and if approved by the Senate (as is likely) it would create the so-called 'general law of environmental licensing' and a series of changes weakening environmental impact assessments, public participation and supervision by environmental agencies. The changes include creation of a self-declared license in which licenses would be issued automatically without any analysis by technical staff in the environmental agencies. Various types of small and medium-sized projects would be completely exempted from licensing. If approved, the bill would cause irreversible environmental losses to megadiverse Brazilian ecosystems and allow installation of projects with high environmental impact without any impact analysis or measures to minimize or recover from impacts or to provide environmental compensation for them.*

**Keywords** Brazil, environmental impact assessment, environmental permit, environmental policy

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Brazil's environmental licensing is under immediate threat from a bill (No. 3729/2004) that has passed the Chamber of Deputies of the National Congress (Ruraro et al. 2021) and is now advancing in the Senate. This bill for a 'general law of environmental licensing,' which would gut the current system, had been stalled in the National Congress since 2004 (*Câmara dos Deputados* 2004). The bill covers licensing by all agencies in the National Environment System (SISNAMA), which includes state and municipal agencies in addition to the federal government. Approval of this bill could jeopardize Brazil's megadiverse ecosystems and the achievement of Sustainable Development Goals (SDGs).

Environmental licensing in Brazil began in 1986 when regulations were established under Brazil's National Environmental Policy (Law 6938/1981) (PR 1981); legal requirements are specified by National Environment Council (CONAMA) resolutions 001/86 and 237/97 (CONAMA 1986, 1997) and by complementary Law 140/2011 (PR 2011). Licensing is done in three phases, the 'prior license' allowing preparation of the 'environmental impact study' (EIA) and 'basic environmental plan' (PBA), the 'installation license' allowing construction to begin, and the 'operating license' allowing the economic activity to begin, for example filling a reservoir and generating hydroelectric power. The federal licensing agency (the Brazilian Institute of the Environment and Renewable Natural Resources, or IBAMA) sets requirements for granting each of these licenses, and these requests are supposed to be satisfied before passing to the next phase (CONAMA Resolution 237/1997). This system has been successively undermined in practice, culminating with construction and operation of the Belo Monte Dam with many requirements unfulfilled (Fearnside 2017).

The bill creates a self-declared license called a 'license by accession and commitment' (LAC) in which project proponents may issue their own licenses automatically without any prior analysis by the environmental agencies. Although this type of license has already been used in some Brazilian states for licensing activities with low environmental impact, there is discussion on the constitutionality of this type of license and on the subjectivity in the definition of what constitutes an activity with 'low environmental impact' (Oviedo et al. 2021).

The lack of nationwide supervision of the licensing process could generate severe consequences, since

control by environmental agencies has been inefficient to ensure that entrepreneurs adopt self-declared protective measures. These consequences are already evident, as various types of licensing have been progressively transferred from federal to state and municipal authorities. For example, in 2018 a change in environmental legislation allowed the Chamber of Mining of the State Council of Mining of Minas Gerais State to simplify the licensing process for the mining complex in Brumadinho (*Assembleia Legislativa de Minas Gerais* 2019), and less than a year later Brazil experienced one of the largest environmental disasters in its history. The collapse of the Córrego do Feijão tailings dam in Brumadinho destroyed hundreds of kilometers of fluvial ecosystems, affecting Indigenous people and causing hundreds of human deaths (Cionek et al. 2019). In Itaituba municipality (Pará State), more than 500 environmental permits for mining exploitation were issued without any supervision (Gonçalves 2022), which probably contributed to the recent contamination of the Tapajós River (Boadle 2022), an important tributary of the Amazon River and the location of one of the Amazon's main tourist attractions: the Alter do Chão beach. The Amazonian region is currently under strong pressure from various forms of exploitation that are unsustainable and environmentally and socially damaging (Pelicice and Castello 2021), and the approval of this bill would further jeopardize the conservation of the Amazon biome, its ecological services as carbon sink (Hansen et al. 2020) and hydrological cycle (Nobre 2014) and, ultimately, global sustainability.

The bill also exempts various types of activities from licensing altogether, including infrastructure for low-voltage electricity distribution, water treatment systems and sewage treatment stations, 'cultivation of agricultural interest' (i.e., soy, oil palm, sugarcane, etc.) and livestock projects. Another change involves the renewal of the license: the bill extends the license validity periods and includes the possibility of the operating license being automatically renewed based on merely completing a form on the internet without any inspection by the licensing agency. Even if the environmental agency is aware of the potential impact generated by the activity to be licensed, the LAC and the automatic renewal of the licenses represent perils for many types of ecological systems throughout Brazil. For example, landholdings included in the Rural Environmental Registry (CAR), or those with a Term of Commitment for restoration of illegally removed native vegetation, could obtain or renew their permits

without any further assessment. The CAR is a mandatory registration that was created to permit 'environmental regularization' of rural landholdings; it is self-declared but theoretically should be validated by the state-level environmental agencies. However, this validation is essentially nonexistent in practice. Regrettably, the CAR has been used as a tool for legalizing land grabs in the Amazon (Ferrante et al. 2021).

In addition, the LAC and automatic license-renewal systems could allow scores of new dams to be built in Brazil without proper evaluation of environmental impacts. Hundreds of dams are planned in the Amazon Basin as a whole (Winemiller et al. 2016). This includes dams as small as 1 MW installed capacity, but in Brazil 'small' dams have been defined since 2016 as those with < 50 MW installed capacity; these are licensed by the state government environmental agencies, which are less rigorous than the federal agency (e.g., Fearnside 2019). Paraná state (in southern Brazil) recently used the LAC provision of Resolution CEMA 107/2020 to approve the prior licenses for 15 'small' hydropower stations (Law no. 20208/2020), including mostly undammed river basins, such as the Ivaí and Piquiri. These rivers are of paramount importance for maintaining the ecological functioning and the environmental services of the Upper Paraná River floodplain; in this case, the operating license will be issued by self-licensing under an LAC. The LAC and automatic license renewal also apply to mine-tailings dams, a category that, even under the stricter regulations of the current licensing system, has caused two of Brazil's worst environmental disasters: the Mariana and Brumadinho dam breaches (Garcia et al. 2017; Cionek et al. 2019).

The general licensing bill weakens the participation of agencies such as the Chico Mendes Institute of Biodiversity Conservation (ICMBio) and the National Indian Foundation (FUNAI), which are responsible, respectively, for 'conservation units' (protected areas for biodiversity) and for guaranteeing the rights of Indigenous peoples. Under the current licensing system, these agencies can present a formal opinion (*parecer*), which may or may not be favorable, on the installation and operation of enterprises that can affect the land and people these agencies protect, and these opinions are considered in decision-making by the licensing agency. If the bill is enacted, the opinions of these agencies would become merely advisory and the licensing agency would be free to ignore them. This is a major concern, since Brazil has 336 federal conserva-

tion units and 724 Indigenous lands, and 145 of the conservation units and 424 of the Indigenous lands are located in the Legal Amazon region. This region is already under multiple threats, including downgrading, downsizing and degazetting of protected areas (Ruaro and Laurance 2022) and the expansion of mining, agribusiness, and aquaculture (Pelicice and Castello 2021). Limiting public participation in environmental governance has been a goal of the current presidential administration; CONAMA, for instance, suffered a drastic reduction in the number of seats for representatives of civil society (Menezes and Barbosa Jr. 2021).

To obtain environmental licenses in Brazil, enterprises currently must carry out the environmental studies requested by the licensing agency (IBAMA), which then analyzes the documents and inspects the project site to verify whether the information is in compliance with the legal requirements. Civil society participates in public hearings (Schumann 2018). Although the effect of this participation on major decisions is limited, it is far better than the essentially complete exclusion of public participation that would result from the proposed law. Defenders of the bill claim that the LAC is a simplification and reduction of bureaucracy in obtaining environmental licenses, and they cling to the argument that environmental damage would be avoided because the federal agencies will be aware of the potential impacts of the polluting activity. However, they fail to argue how this 'potentially polluting activity' will be assessed and supervised in the long term. While simplification of the licensing and environmental assessment process is not a novelty, it is usually associated with potentially negative environmental outcomes, especially since the 'simplified' process would have shorter deadlines for evaluating environmental studies and a great reduction in public participation (Enríquez-de-Salamanca 2021).

The general licensing bill shows that Brazil has a contradictory stance with regard to environmental conservation, which has globally significant implications given that Brazil has been identified by the Convention on Biological Diversity as the country with the greatest biodiversity (UNEP 2021) and that the country contains biomes that are global priorities for conservation (Myers et al. 2000). Despite Brazil's ambitious goals for sustainable development (Mittermeier et al. 2010), the country's current position in achieving the 17 UN sustainable development goals (SDGs) is not encouraging, and the proposed bill would fur-

ther impede attainment of the SDGs. Brazil's position is especially problematic for goals 12 (sustainable consumption and production patterns), 15 (sustainable use of terrestrial ecosystems), 16 (peaceful and inclusive societies) and 17 (policy coherence for sustainable development). Approval of the bill may also affect other policies and sectors, especially Brazil's commodity exports, given that international trade agreements increasingly take sustainability into account and public support for further strengthening of these agreements is increasing in importing countries (Kehoe et al. 2020).

The proposed bill represents a setback for both environmental and social interests. The changes ignore the precautionary principle, since the new general law would allow projects that can cause pollution and loss of biodiversity to be authorized without analysis and supervision by the licensing agency. Brazil's current licensing system has many flaws (Fearnside 2014, 2017, 2020); however, it offers much more protection against environmental and human rights impacts than would be the case under the proposed law.

Organizations and institutions that defend the environment are racing against time to avoid a 'flexibilization' of environmental licensing that would be likely to cause irreversible environmental losses. Brazil should eschew retrograde legislative changes to the environmental licensing process and instead should invest in improving the physical structure and human resources of environmental agencies in order to ensure the conservation of biodiversity and the maintenance of environmental quality, including conditions of water, soil, and the atmosphere.

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**Conflict of interest** None

**Ethical standards** None

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