

Environmental Impact Assessment, its faces and interfaces

Maria Rita Raimundo e Almeida ¹

Fernanda Aparecida Veronez ²

Alberto de Freitas Castro Fonseca ³

¹ PhD in Environmental Engineering Sciences, Professor,
Federal University of Itajubá, Itajubá, MG, Brazil
E-mail: mrralmeida@unifei.edu.br

² PhD in Environmental Engineering Sciences, Professor,
Federal Institute of Espírito Santo, Vitória, ES, Brazil
E-mail: fveronez@ifes.edu.br

³ PhD in Sustainable Development, Professor, Programa de Pós-Graduação em Engenharia Ambiental,
Universidade Federal de Ouro Preto, Ouro Preto, MG, Brazil
E-mail: alberto@ufop.edu.br

ARTICLE – DOSSIER

Environmental Impact Assessment (EIA) – “the process of identifying the future consequences of a current or proposed action” (IAIA, 2009, p.1) – is a policy tool that can be used to plan, manage and support socio-environmental decision-making (GLASSON; THERIVEL, 2019). EIA emerged in the United States in 1969, within the National Environmental Policy Act (Nepa) framework, but it has spread to almost every country on Earth. A recent study identified that 183 of the 197 surveyed countries had legal requirements for EIA application (YANG, 2019). The worldwide spread of EIA is understandable; after all, the environmental problems that motivated the creation of this policy tool in the 1960s are getting increasingly severe (IPBES, 2019; UNITED NATIONS, 2019). Economic development needs, today, more than ever, thoughtful decision-making processes, such as those informed by an impact assessment.

EIA was incorporated in the Brazilian National Environmental Policy with the enactment of the Federal Law N°. 6,938 of 1981 and other instruments, such as environmental licensing, zoning, and environmental quality standards. Since then, EIA has been implemented throughout the Brazilian territory – often linked to environmental licensing. Some scholars claim that EIA has a dual nature (procedural and technical) related to a “family of instruments” with different facets (MORRISON-SAUNDERS *et al.*, 2014; PARTIDÁRIO, 2012). As a process, EIA aims to identify, predict, assess and mitigate the biophysical, social and economic impacts of development proposals (IAIA; IEA, 1999). As a technical instrument, EIA articulates a series of methods that can be applied to assess individual projects or policies, plans and programs (FISCHER; JHA-THAKU, 2013). When applied to projects, this instrument is most often called EIA or “Project-level EIA”; when applied to policies, plans, and programs, it is often called “Strategic Environmental Assessment” or SEA.

This dossier, entitled “Environmental Impact Assessment, its Faces and Interfaces”, brings together some papers presented at the 5th Brazilian Conference on Impact Assessment (whose Portuguese acronym is CBAI). The CBAIs are promoted by the Brazilian Association for Impact Assessment (whose Portuguese acronym is ABAI), a national, multidisciplinary association that brings together public

and private organisations, civil society entities, individuals, practitioners, and students who develop activities in the area of impact assessment. Its 5th edition, held remotely in 2021 due to the Covid-19 pandemic, aimed to discuss innovative approaches and methodologies in the impact assessment that can promote environmental protection, sustainable development. The theme of the conference, given the growing phenomenon of political polarisation and disinformation, was “Environmental Impact Assessment in post-truth times”. For Dunker (2017), the post-truth discourse replaces facts and objective verifications with reasonable opinions based on repetitions of unfounded alternative facts.

Internationally, post-truth permeates the environmental arena, having reached the EIA field where it may be compromising its role of supporting decision-making based on evidence and facts. Development concerns over administrative efficiency and legal security have motivated proposals to reform EIA regulations in recent years. This phenomenon is happening worldwide, but it is particularly intense in Brazil, where several EIA reform proposals have been put forward in recent years (FONSECA; SÁNCHEZ; RIBEIRO, 2017). The proposed changes, often based on alternative and unfounded facts, are worrisome insofar as they may significantly affect the future of EIA in Brazil (ATHAYDE *et al.*, 2022; FONSECA *et al.*, 2019). For example, in 2021, the Chamber of Deputies approved a version of the “General Law on Environmental Licensing”, which, if later approved by the Senate and ratified by the presidency, will have adverse implications to EIA practice in Brazil. This initiative adds to many others that corroborate a panorama of the dismantling of environmental policies and institutions in Brazil through the weakening of public participation, the frequent use of authority to advance economic agendas at the expense of environmental quality and social justice (ADAMS *et al.*, 2020).

The collection of articles in this dossier dialogues with this context. The first article, “Implications of a new licensing framework on the impact assessment of water and sewage systems”, by Izabel Freitas Brandão and Amarilis Lucia Casteli Figueiredo Gallardo, addresses the regulatory framework of EIA to analyse, longitudinally, the development of specific legislation on EIA and environmental licensing of water supply and sewage projects and compare it with the changes foreseen in the proposal of the new General Law of Environmental Licensing.

The second article, “The experience of the municipalities of Minas Gerais State (Brazil) that implemented local environmental licensing”, by Mônica de Sousa Alves, Alexandre Túlio Amaral do Nascimento, and Alberto Fonseca addresses the Minas Gerais experience with the decentralisation of environmental licensing to the municipal level, intensified by the enactment of Complementary Law N°. 140 of 2011. The authors corroborate that concerns over administrative efficiency (rather than environmental conservation) have been the primary motivation for the municipalisation of licensing and EIA.

This dossier also addresses EIA in the sphere of planning, dealing with more strategic decision-making levels, which, as explained above, usually takes the name of SEA (FISCHER, 2007). However, despite being essential and widespread in many countries, SEA is not adequately regulated in Brazil and remains practised in a non-systematic way. To explore this phenomenon, Rosane de Souza Oliveira and Anne Caroline Malvestio evaluate proposals for regulating SEA in the article “The regulation of Strategic Environmental Assessment in Brazil” based on good practices frequently cited in the literature in Brazil.

In the article “Contributions of the French Strategic Environmental Assessment to Brazilian planning in water source areas: the Billings Reservoir sub-basin case”, Carla Grigoletto Duarte, Larissa Ribeiro Souza and Simone Mendonça dos Santos, based on the experience of the French water management model, explore three potential contributions of Strategic Environmental Assessment to the case of the Billings Reservoir sub-basin Environmental Protection and Development Plan.

Focusing more on project-level EIA and exploring some of its aspects, this dossier also brings articles that target specific EIA stages, such as screening (or project classification), public participation, and the identification of significant impacts. Screening is the step responsible for the preliminary evaluation of the potential impact of projects in order to decide whether projects should undergo environmental licensing

and, if so, with or without EIA (IAIA; IEA, 1999). In the article “Environmental licensing screening in Espírito Santo state: the practice for small Hydroelectric Power Plants”, Fernanda Aparecida Veronez, Maria Stella Sena Estevam and Maria Rita Raimundo e Almeida analyse the practice of screening of Hydroelectric Generating Plants in Espírito Santo state and compare it with the screening procedures found in other Brazilian states, revealing essential lessons for consultants, public managers and legislators.

This dossier also includes the article “Participatory methodologies and the production of data on artisanal fishing in areas with offshore wind farm projects in Ceará, Brazil”, which addresses critical decision-making issues in social participation, a topic that has long been critical to the effectiveness of EIA (SADLER, 1996). This work by Thomaz Willian de Figueiredo Xavier, Adryane Gorayeb Nogueira Caetano and Christian Brannstrom aims to evaluate the application of participatory methodologies in the generation of data on fishing activity, to analyse the potential impacts of Offshore Wind Farms in the marine territories of the state of Ceará, focusing on artisanal fishing.

Finally, the work by Fernanda Aparecida Veronez, Fabrício Raig Dias Lima and Ghislain Mwamba Tshibangu, entitled “Environmental impacts of hydropower plants in Brazil: identification guide”, presents a proposal for the identification of environmental impacts of hydroelectric projects.

We hope this dossier can contribute to more robust debates around EIA effectiveness in Brazil.

Good reading!

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