



Project justification and EIA: Anything goes?

Álvaro Enríquez-de-Salamanca ^{a,b,c,*}

^a Draba Ingeniería y Consultoría Medioambiental, Cañada Nueva 13, 28200 San Lorenzo de El Escorial, Spain

^b Facultad de Ciencias Biológicas, Universidad Complutense de Madrid, José Antonio Novais 12, 28040 Madrid, Spain

^c Facultad de Ciencias, Universidad Nacional de Educación a Distancia, Senda del Rey, 11, 28040 Madrid, Spain

ARTICLE INFO

Keywords:

Environmental impact assessment
Political pressures
Significant impacts
Unjustified projects

ABSTRACT

Environmental Impact Assessment (EIA) incorporates environmental aspects into decision-making, but sometimes it is not effective in rejecting projects with dubious justification, significant impacts and little social utility, especially when they have political support. EIA is expected to achieve sustainable development, but without calling development into question; however, it should be able to ask the question of whether development is really necessary. Although EIA is political, as a part of the decision-making process, politicization must be limited to prevent it from becoming a mere instrument for giving an “environmental veneer” to development. Some measures that can help avoid unjustified projects are: adopting administrative justice approach to EIA; minimising politicization of EIA agencies; improving transparency in decision-making and proportionality of EIA procedures; carrying out pre-feasibility studies; increasing the scope of SEA; allowing more than one SEA or EIA procedure for the same development throughout the planning process; strengthening the justification of the project in EIA documents; or making the scoping phase mandatory at least for major projects.

Environmental impact assessment (EIA) aims to incorporate environmental aspects into decision-making (as a ‘decision support’ rather than ‘decision making’ instrument, as Retief et al., 2020 point out) or, as Morrison-Saunders (2018) notes, ‘think-before-act’. However, EIA systems differ in their ultimate objective, which may be the pursuit of sustainable development or mere environmental protection, and may integrate environmental, social and economic aspects to a greater or lesser extent, resulting in a wide variety of situations depending on the legal and socio-cultural contexts (Morrison-Saunders, 2018).

Projects distribute impacts and benefits, so political debate and action in decision-making is legitimate, and EIA is part of this process (Beattie, 1995; Morrison-Saunders and Bailey, 2000; Cashmore et al., 2010); furthermore, decision-making is influenced by the concept of the general interest of politicians (Enríquez-de-Salamanca, 2018). There are different institutional arrangements for EIA systems, but in all of them decision-making is inherently political, depending on a politician or a politically controlled agency, varying mostly in the transparency of the process.

Another essential aspect that differentiates EIA systems is the way they determine which projects should be subject to this procedure, through thresholds or through a case-by-case analysis, and the difference in terms of acceptability: there is no universal scale, so what is

acceptable in one country or region may not be acceptable in another.

Throughout its half century of existence the achievements of EIA have been undisputed, but it still has major shortcomings; Loomis and Dziedzic (2018) analyse the effectiveness of EIA systems, and there is much regional research.

Among the shortcomings, a topic that is rarely addressed in the technical and academic debate is the justification of projects submitted to EIA; whether or not they are really necessary. To document this paper we have searched in Scopus, using the terms “environmental impact assessment” or “EIA” and “justification” (22 results) or “objective” (503 results); after consulting the documents, we can count on the fingers of one hand those who contribute to this debate.

This paper focuses on a problem that sometimes (but not always) arises in the context of EIA procedures: the submission to EIA of projects whose environmental, social, technical and even economic justification is highly questionable. This article points out how pressure from developers or approval agencies can sometimes lead to projects that are difficult to justify being assessed, and even to obtaining a favourable EIA even if it is subject to conditions, when it would have been more reasonable to rule them out.

This paper is mainly based on local –in this case Spanish– examples and evidence; its aim is not to assess the quality of national EIA systems,

* Draba Ingeniería y Consultoría Medioambiental, Cañada Nueva 13, 28200 San Lorenzo de El Escorial, Spain.

E-mail address: aeenriquez@draba.org.

<https://doi.org/10.1016/j.eiar.2020.106540>

Received 21 August 2020; Received in revised form 7 December 2020; Accepted 8 December 2020

Available online 16 December 2020

0195-9255/© 2020 Elsevier Inc. All rights reserved.

but to highlight a real problem and help identify it and adopt preventive solutions at a global level. There are certainly some mature EIA systems where this problem may not exist, but the very political nature of the decision-making process makes it a certain risk in much of the world, and not only in countries with weak democracies.

Developers propose projects that, if they fall within the scope of the EIA regulations (by threshold or after a screening phase), will be subject to a regulated procedure, in which some alternatives should be analysed. But are these projects justified and are they logical, sustainable and of social interest? The EIA answers these questions *ex post*, once they have been assessed. And this puts significant pressure on the evaluators: it is more difficult to issue a negative decision on a project than to decide on the most favourable (or least unfavourable) alternative and possible mitigation measures.

When developers are private, there is usually less pressure on EIA agencies (although there are lobbying groups and political connections with large companies). But when the developers are government authorities, who may also be the authorising agencies, pressures can be multiplied: the EIA agency may have difficulty in rejecting a project proposed by another agency (even by its own government) and may be forced to pronounce itself on the preferred alternative, when in fact none of the proposals could be acceptable. When a project is supported by the political establishment the pressure increases (Wachs, 1990; Moon, 1998; Richardson, 2005). Kolhoff *et al.* (2013) note that EIA legislation is influenced by environmental authorities that support it and sectoral authorities that hinder it; the same can sometimes be extrapolated to the EIA process itself.

The independence and functioning of EIA agencies varies between countries or regions; in all cases the decision on EIA is made by an elected politician or government agency (Morrison-Saunders, 2018), so political control is a constant. However, professionalism and independence can vary widely. Problems attributed to EIA agencies in some countries include weak institutional capacity, low objectivity, excessive discretion, corruption or bias, political manipulation, or lack of transparency (Fonseca *et al.*, 2017; Enríquez-de-Salamanca, 2018; Khan *et al.*, 2020). Two examples highlight the pressures on EIA agencies. The resolution of EIA processes is often faster for public projects than for private ones (e.g. Khan *et al.*, 2020). EIA agencies are sometimes hostile to small private developers while they are complicit with large public or private developers; it may be easier to obtain authorisation for a motorway or high-speed railway than for a forest track on a private property. On the other hand, projects submitted to EIA are rarely rejected: they are usually approved with conditions (Morrison-Saunders, 2018). Kolhoff *et al.* (2013) highlight the influence of the leadership and expertise of the EIA authority and the level of democracy of the political system. These are undoubtedly important factors, but in consolidated democracies with mature EIA systems the degree of political interventionism of each government also has a great influence, varying between extremes such as technocratic governments, which are not very prone to political control, to populist governments, where politics and propaganda flood the administrative sphere.

When EIA is highly politicised it can become a cosmetic tool to embellish development: a development decision is firm from the outset, and EIA only serves to incorporate environmental considerations, but not to question the need for such development. Hollick (1986) already indicated that EIA often leads to changes in proposals, but some people consider it a failure because it is not capable of stopping development.

But even these changes are not always evident: Baker and Wood (1999) noted that changes had occurred in 94% of the cases studied in eight EU countries; Heinma and Pöder (2010) indicated that half of the EIAs in Estonia did not alter the decision of the authorities; Nadeem and Hameed (2008) that in Pakistan EIA is used as a tool for project justification; and Bragagnolo *et al.* (2017) that it has had a very limited influence on decision-making in Brazil. Furthermore, alternatives may be subjective and arbitrary (Steinemann, 2001).

The Spanish airport in Ciudad Real is an example of a project that

should never have been proposed. The first private international airport in Spain, it was proposed during the construction boom in the 2000s in Spain as an alternative to the saturated Madrid-Barajas airport, with the enthusiastic support of the Chamber of Commerce and the local and regional authorities, and the financing of a politically controlled savings bank. However, the project had a number of unconsidered drawbacks. Its distance from Madrid, over 200 km, meant that it was not a real alternative to Madrid-Barajas; its cost was high, 450 million euros for construction apart from maintenance; and environmentally it affected a Special Protection Area (SPA) designated under the EU Bird Directive, with several unique steppe bird species. It was submitted to EIA, obtained a favourable resolution, and work began. However, it had two judgements from the European Court of Justice on the effect on the SPA, requiring further EIA procedures, up to three, in which the State declared the general interest and significant compensatory measures were established. In this period of time, Madrid-Barajas was extended, so this project lost even more sense. Even so, it was continued, despite its dubious profitability and significant environmental impact. It was inaugurated in 2008, without having implemented the compensatory measures required in the EIA. It only had a few flights; in 2011 it stopped being used because of its low profitability, and in 2012 it was closed by court order, with a debt of more than 500 million euros. In 2016 it was sold for 56 million euros.

Several government-promoted toll roads also had a similar result. The increase in traffic in the 1990s and 2000s, due to intense economic activity (largely associated with the construction boom in the 2000s), led the government to propose the construction of a large number of toll roads, through concessions. Numerous projects were carried out and submitted to EIA; many of these roads had significant environmental impacts, and in some cases affected the Natura 2000 Network, requiring compensatory measures. However, the political will for their construction was strong, and all obtained a favourable EIA. During construction it was seen that the costs were much higher than expected, especially because of the cost of land expropriations. In addition, traffic studies were very optimistic, and these highways were proposed as alternatives to free motorways: paying for less traffic, in regions not used to paying for road use. But above all there was a political defence of the concession system. From the beginning, their use was very low, and it was aggravated by the 2008 crisis, which led to a reduction in traffic. There was a chain of bankruptcies: a total of nine highways went bankrupt. In 2018, the government had to rescue them, taking over at a cost of 2.000 million euros, although creditors claimed up to 4.500 million.

Fortunately, other mega-projects with strong environmental impacts and questionable profitability were abandoned before being submitted to EIA. Several were gambling and leisure complexes as EuroVegas Madrid, a macro tourist and gambling complex to create a small "Las Vegas" on the outskirts of Madrid; Live! Resorts Madrid, Europe's largest leisure complex very close to Madrid-Barajas airport; or Gran Scala, a large number of casinos, hotels and theme parks in the desert region of Los Monegros, far from Madrid and Barcelona, with little water and in a region rich in EU habitats of interest and endemic plant species.

Noorbakhsh and Ranjan (1999) indicated that a significant number of projects implemented by international donors in developing countries produced few or no results and sometimes had significant impacts.

In some jurisdictions, such as the EU, EIA is intended to help achieve sustainable development; however, some projects, such as those discussed above, are inherently unsustainable, with a strong environmental impact, poor economic returns, and a very questionable social function, and despite this they obtained favourable EIAs.

Certainly the above examples are failures in the application of EIA. EIA procedures can abort some developments through negative resolutions; in other cases so many problems may be revealed in their examination that it is decided to reject them; and others projects may have mitigation conditions that developers find just too onerous. There are many examples of negative EIA resolutions, including some large projects, in Spain (Balboa refinery and pipeline; Biscarrués dam; Fayón

thermal power station; hydrocarbon prospecting in the Gulf of Valencia; rare earth mining in Campo de Montiel; Solvay combined cycle power plant), and in many other countries (e.g. Bylong and Rocky Hill coal mines, New South Wales, Australia; Ein Hashofet wind farm, Israel; Druridge Bay coal mine, UK; housing in Fordingbridge, UK; Keystone-Like pipeline, New York, US; Lotus Creek wind farm, Queensland, Australia; potash mine in Udon Thani, Thailand; Usibelli coal mine, Alaska, US). There are also cases where development has been stopped or delayed for environmental reasons, requiring further studies (e.g. first McKenzie gas pipeline project, Canada).

However, it is often difficult for the EIA agency to discuss the need for development with the approving agency. Is the proposed airport, road or pipeline really necessary? If the developer and the approving agency argue that the project is essential to the country or region (even if the argument is a house of cards), the EIA agency often cannot discuss that justification; it lacks data and criteria to do so. If a government department argues that a project is essential, the EIA agency may be pressured to approve it, even with conditions, to certify that the development is sustainable. This is based on the principle that there must be development: the project must be carried out, but in the least environmentally damaging way. Bond et al. (2020) argue that EIA supports neoliberal programmes by facilitating economic development. In fact, as a key tool of sustainable development, EIA is expected to make the developments sustainable, but not to prevent them.

The EIA can then be limited to giving planning an “environmental veneer”, an undesirable situation that is sometimes considered the real object of EIA. For example, the aim of the EU EIA Directive is to ensure that projects likely to have a significant effect on the environment are properly assessed before they are approved (EU, 2015), but Pchalek (2019) points out that the aim is to select suitable alternatives, minimising and compensating for the impacts: the idea of rejecting the project is not even considered.

EIA should be able to ask questions such as whether development is required, as Clark (1983) indicated almost four decades ago. However, this question is often left out of the debate, mainly due to political pressure, and EIA is limited to the choice of alternatives and mitigation measures (often overestimated in terms of their effectiveness). It seems that setting conditions for a project or mitigation measures always make it environmentally acceptable, and this is not true. In some cases the problem is the environmental (and sometimes economic) irrationality of the project.

A convenient way to filter projects is to carry out pre-feasibility studies, to make a preliminary decision before submitting them to EIA. “Pre-feasibility study” is a broad and ambiguous concept; sometimes they are just technical-financial studies to determine the viability of a project. However, when environmental aspects are incorporated, it becomes a tool of great interest: an unregulated EIA before the regulated EIA. This methodology has been applied, for example, in road planning in Spain (Gonzalez and Enríquez-de-Salamanca, 2018), carrying out environmental sensitivity studies in order to make a preliminary proposal for alternatives that are then submitted to EIA.

This is not a SEA procedure, which in this case is carried out on a larger scale (National or Regional Strategic Plans), but an intermediate stage between SEA and EIA, not included in any kind of regulated procedure. Similarly, current planning of solar photovoltaic plants in Spain includes previous studies to find suitable locations, according to sunlight, relief and land costs, but also environmental criteria such as protected areas, vegetation, landscape sensitivity or wildlife sensitive areas; these studies are prior to the EIA, but without forming part of a SEA process. Martin and Morrison-Saunders (2015) analyse informal strategic advice in Western Australia, a type of SEA, used to inform pre-project development stages outside the legally binding project-based EIA.

Planning processes are highly variable, with a wide casuistry, which must be managed with two environmental assessment tools, SEA and EIA, applied at some point in the process, and without being duplicated.

Some actions that can be evaluated directly through EIA, but others would require several successive SEA and EIA procedures, with increased detail: SEAs of national, regional, district or local plans or basic EIAs for preliminary analysis of alternatives and detailed EIAs to adequately define environmental impacts and mitigation measures.

Frequently the leap in definition between SEA and EIA is enormous, making the former useless; for example, the leap between the SEA of a national strategic road plan and the EIA of a specific road project in Spain is immense. Furthermore, not all projects or developments follow a policy-plan-programme-project scheme; some critical projects, with strong political interests and significant environmental impacts, emerge “from nowhere”, and are submitted directly to EIA, in a “policy and programme vacuum” (Morrison-Saunders and Bailey, 2000). Macro-projects of leisure and gambling are an example.

The scoping phase of the EIA can also act as a filter for critical projects, despite limited public participation, although there are also the above-mentioned pressures on the EIA agency. At the scoping stage, at least in the EU, the administrations affected and interested parties are consulted in order to define the scope and level of detail of the environmental impact statement (EIS). But this phase also allows the main environmental problems of the project and the concerns of the administrations affected, especially those responsible for the most sensitive aspects, to emerge at an early stage; the effects on protected areas, biodiversity, archaeological sites, noise or water scarcity, for example, are aspects that often come to light in this initial consultation, and which, together with the basic data of the project, give a preliminary idea of the sustainability of the project.

In times of crisis the role of EIA is weakened by economic pressures; it is easy to blame EIA for lack of economic activity or unemployment. After the economic crisis of 2008 a politician pointed to EIA as responsible for the halting of investments of tens of thousands of euros in Spain. This view, common in much of the world, has generated pressure to shorten and simplify EIA processes, seeking faster approval even if it is less guaranteed. One of the consequences is, for example, that the EU Member States have a mandate to simplify their EIA procedures and, as a consequence, the scoping phase is currently voluntary.

In addition, in Spain, what is now called “simplified EIA” is simply a screening process. In Brazil, amendments to EIA rules have been proposed justified by the need to speed up the licensing of projects, and environmental agencies have been accused of hindering investments necessary for the development of the country. This has led, for example, to the elimination of public participation meetings; proponents would only have to inform stakeholders and interested parties about the proposed project and its potential impacts (Bragagnolo et al., 2017). Bond et al. (2014) indicate that governments have carried out significant streamlining of the EIA, which has had direct adverse effects on some of the benefits it should bring.

Environmental protection generally has broad social support, as an abstract concept, but when it involves the halting of specific developments or the adoption of unpopular measures, that support diminishes dramatically. Maintaining adequate environmental protection requires governments with solid legal and environmental principles, capable of adopting the necessary solutions, even if they are sometimes not very popular; climate change mitigation is a clear example. However, there are a growing number of populist governments that are moving in the opposite direction, ignoring environmental constraints or denying them directly. Also the growing polarization in politics, which at least in part may be due to the spurious manipulation of social networks, acts negatively on EIA; consensus has become an archaic concept, and policy choices are based on the denial of rivals, which permeates all kinds of decisions.

The current global crisis associated with the COVID-19 pandemic also poses significant challenges to EIA: according to the World Trade Organization, world trade will be reduced by 13–32% in 2020 due to this pandemic (WTO, 2020), and according to the World Bank, GDP will have a global contraction of 5.2% (World Bank, 2020). Given this

scenario, economic recovery is a priority, and this may place EIA in a secondary position. This is a bias that can favour development over environmental protection, i.e. an imbalance in “sustainable development”, favouring “development” rather than “sustainability”.

It is difficult to avoid political pressure on EIA because it is inherent in the decision-making processes. However, some measures could help minimise the approval of unjustified projects with significant environmental impacts and limited social interest. Some possibilities are listed below:

- Approach EIA from the point of view of administrative justice, focusing on three aspects: lawfulness, procedural fairness and reasonableness, which require an empowering legal and procedural framework (Retief et al., 2020). A change of mentality is needed, which understands EIA as a fair and objective administrative procedure and not as an obstacle or a tool to justify projects. This administrative justice, especially reasonableness, can help bring illogical projects to light.
- Minimise the politicization of EIA agencies, to reduce pressures. It would be useful if they were independent agencies, reporting directly to the presidency of the government (national or regional), to avoid having to pronounce on projects promoted by the same department or ministry. It is also important to reduce the positions of trust between evaluators and to promote instead an independent body of officials, as is the case of the judicial system. However, there are increasing attempts (or advances) in democratic countries to politically control the justice system (e.g. Hungary, Poland, Spain, US), so this does not seem to be a definitive solution.
- Improve transparency in decision-making, reducing arbitrariness and contradictory decisions. It is also important to improve the communication of resolutions to the public, so that the reasons for the decisions taken are clearly understood.
- Improve the proportionality of EIA procedures and resolutions so that they are in line with the importance of the projects and their environmental impacts. It is not logical that large projects with strong environmental impacts are easier to process than small private actions with limited impacts. Apart from screening processes, different types of EIA are strongly recommended, with more or less depth depending on the importance of the projects (or their impacts more precisely), as is already the case in some countries of the world.
- Conduct pre-feasibility studies of projects before submitting them to EIA, including social interest, functionality costs and environmental criteria, in a transparent manner. These studies may be or may be not part of the EIA process.
- Increase the scope of SEA, including the preliminary stages of project planning, without ruling out the possibility of carrying out more than one SEA or EIA procedure, with an increasing level of detail, throughout the process of planning process an action.
- Reinforce the chapters on project justification in EIA documents (EIS and screening or scoping documents). The project objective (what is it for?) is not the same as the justification, where it is necessary to provide more comprehensive information on its need and suitability; the documents almost always include the objective, but rarely the justification.
- Despite the trend towards simplifying EIA procedures, the scoping phase is interesting for detecting conflicting projects; it is becoming more important in the era of proportionate and streamlined EIA. Despite this, it is somewhat underplayed for most projects. Scoping should be mandatory at least in the most important projects. I may be possible to divide the ordinary EIA procedure into two, one with mandatory scoping for large projects, and one with voluntary scoping for smaller projects.

We cannot prevent EIA, as part of the decision-making process, from being politically charged, but if it becomes merely a political instrument to justify projects it will have lost much of its meaning.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Baker, A., Wood, C., 1999. An evaluation of EIA system performance in eight EU countries. *Environ. Impact Assess. Rev.* 19, 387–404.
- Beattie, R.B., 1995. Everything you already know about EIA (but don't often admit). *Environ. Impact Assess. Rev.* 15 (2), 109–114.
- Bond, A., Pope, J., Morrison-Saunders, A., Retief, F., Gunn, J.A.E., 2014. Impact assessment: eroding benefits through streamlining? *Environ. Impact Assess. Rev.* 45, 46–53.
- Bond, A., Pope, J., Fundingsland, M., Morrison-Saunders, A., Retief, F., Hauptfleisch, M., 2020. Explaining the political nature of environmental impact assessment (EIA): a neo-Gramscian perspective. *J. Clean. Prod.* 244, 118694.
- Bragagnolo, C., Carvalho, C., Ladle, R.J., Pellin, A., 2017. Streamlining or sidestepping? Political pressure to revise environmental licensing and EIA in Brazil. *Environ. Impact Assess. Rev.* 65, 86–90.
- Cashmore, M., Richardson, T., Hilding-Rydevik, T., Emmelin, L., 2010. Evaluating the effectiveness of impact assessment instruments: theorising the nature and implications of their political constitution. *Environ. Impact Assess. Rev.* 30 (6), 371–379.
- Clark, B.D., 1983. The aims and objectives of environmental impact assessment. In: PADC Environmental Impact Assessment and Planning Unit (Ed.), *Environmental Impact Assessment. NATO ASI Series (Series D: Behavioural and Social Sciences)*, vol. 14. Springer, Dordrecht, pp. 3–11.
- Enríquez-de-Salamanca, Á., 2018. Stakeholders' manipulation of environmental impact assessment. *Environ. Impact Assess. Rev.* 68, 10–18.
- EU, 2015. Interpretation of Definitions of Project Categories of Annex I and II of the EIA Directive. European Commission. <https://doi.org/10.2779/5854181>.
- Fonseca, A., Sánchez, L.E., Junqueira, J.C., 2017. Reforming EIA systems: a critical review of proposals in Brazil. *Environ. Impact Assess. Rev.* 62, 90–97.
- Gonzalez, A., Enríquez-de-Salamanca, A., 2018. Spatial multi-criteria analysis in environmental assessment: a review and reflection on benefits and limitations. *J. Environ. Assess. Pol. Manage.* 20 (3), 1840001.
- Heinma, K., Pöder, T., 2010. Effectiveness of environmental impact assessment system in Estonia. *Environ. Impact Assess. Rev.* 30 (4), 272–277.
- Hollick, M., 1986. Environmental impact assessment: an international evaluation. *Environ. Manag.* 10 (2), 157–178.
- Khan, M., Chaudhry, M.N., Ahmad, S.R., Saif, S., Mehmood, A., 2020. Performance of EIA authority and effectiveness of EIA system in Pakistan. *Environ. Impact Assess. Rev.* 81, 106357.
- Kolhoff, A.J., Driessen, P.P.J., Runhaar, H.A.C., 2013. An analysis framework for characterizing and explaining development of EIA legislation in developing countries - Illustrated for Georgia Ghana and Yemen. *Environ. Impact Assess. Rev.* 38, 1–15.
- Loomis, J.J., Dziedzic, M., 2018. Evaluating EIA systems' effectiveness: A state of the art. *Environ. Impact Assess. Rev.* 68, 29–37.
- Martin, L., Morrison-Saunders, A., 2015. Determining the value and influence of informal strategic advice for environmental impact assessment: Western Australian perspectives. *Impact Assess. Proj. Apprais.* 33 (4), 265–277.
- Moon, B., 1998. Environmental impact assessment in Queensland, Australia: a governmental massacre! *Impact Assess. Proj. Apprais.* 16 (1), 33–47.
- Morrison-Saunders, A., 2018. *Advanced Introduction to Environmental Impact Assessment*. Elgar, Cheltenham and Northampton.
- Morrison-Saunders, A., Bailey, J., 2000. Transparency in environment impact assessment decision-making: recent developments in Western Australia. *Impact Assess. Proj. Apprais.* 18 (4), 260–270.
- Nadeem, O., Hameed, R., 2008. Evaluation of environmental impact assessment system in Pakistan. *Environ. Impact Assess. Rev.* 28 (8), 562–571.
- Noorbakhsh, F., Ranjan, S., 1999. A model for sustainable development: integrating environmental impact assessment and project planning. *Impact Assess. Proj. Apprais.* 17 (4), 283–293.
- Pchalek, M., 2019. The legalization of unpermitted projects in the light of requirements of the EIA directive. *Eur. Energy Environ. Law Rev.* 28 (3), 101–106.
- Retief, F.P., Fischer, T.B., Alberts, R.C., Roos, C., Cilliers, D.P., 2020. An administrative justice perspective on improving EIA effectiveness. *Impact Assess. Proj. Apprais.* 38 (2), 151–155.
- Richardson, T., 2005. Environmental assessment and planning theory: four short stories about power, multiple rationality, and ethics. *Environ. Impact Assess. Rev.* 25, 341–365.
- Steinemann, A., 2001. Improving alternatives for environmental impact assessment. *Environ. Impact Assess. Rev.* 21 (1), 3–21.
- Wachs, M., 1990. Ethics and advocacy in forecasting for public policy. *Bus. Prof. Ethics.* J. 9 (1–2), 141–157.
- World Bank, 2020. *Global Economic Prospects*, June 2020. World Bank, Washington, DC. <https://doi.org/10.1596/978-1-4648-1553-9>.
- WTO, 2020. Trade Set to Plunge as COVID-19 Pandemic Upends Global Economy. https://www.wto.org/english/news_e/pr855_e.htm (accessed 1.11.2020).