

Environmental Impact Assessment: A Middle Eastern Experience

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ABSTRACT

Environmental impact assessment (EIA) is an important environmental protection tool introduced into the environmental governance framework to evaluate and inform the administrative decision-making processes regarding whether certain developments or projects are to be allowed. In this article, EIA's legal status and procedure are examined in relation to a Middle Eastern context, specifically to the Kingdom of Saudi Arabia (KSA). Two different types of analysis are employed. The first is doctrinal analysis, focusing on the legal and statutory provisions regulating and organising this environmental protection tool—this genre of analysis entails identifying and unpacking the laws and regulations that govern this tool. The second type is qualitative analysis involving original data from 27 semi-structured interviews—one of the first of its kind on this topic in the KSA. The key contribution of the article comprises the examination and synthesis of the current status of different theories in the current international literature with regard to the underexplored issue of EIAs in the KSA.

KEYWORDS: environmental impact assessment, Kingdom of Saudi Arabia, environmental governance, environmental law, EIA procedure/steps, screening, scoping, environmental statement, general environmental law, rules for implementation

1. INTRODUCTION

It is hard to find any disagreement regarding the importance of environmental impact assessment (EIA) in assessing and evaluating the potential environmental harms of projects and developments. This explains its worldwide reach,¹ since its enactment in the USA in 1969.² The widespread use of the term EIA may misleadingly suggest

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1 Nicola Ulibarria and others, 'How Does Stakeholder Involvement Affect Environmental Impact Assessment?' (2019) 79 *Environmental Impact Assessment Review* 1, 1.

2 Lynton K Caldwell, 'Environmental Impact Analysis (EIA): Origins, Evolution, and Future Directions' (1988) 6(3) *Impact Assessment* 75.

that the nature, mechanisms and steps, and even purpose of EIA regimes are identical in different jurisdictions and when referred to in the literature. However, retrospective studies, for example in the UK, have found that, at the practical level, 'EIA regulations are often misunderstood and misinterpreted'.³ Moreover, at the theoretical level, scholars do not agree on the exact meaning of some of the EIA steps and what some of its procedures entail.⁴ In fact, the literature reveals contention regarding both the nature and different aspects of the EIA. As well articulated by Lawrence, that includes⁵

... debates between advocates of a scientific EIA process and proponents of a more streamlined, practical EIA process; between adherents of an apolitical, collaborative EIA process and advocates of a political, conflict-based, democratic EIA process; between those characterising EIA as essentially procedural requirements and those stressing that EIA should advance environmental quality and sustainability objectives; between advocates of a technical, rational EIA process and those arguing that EIA is a form of adaptive environmental management and among supporters of the rational-technical, community control, and social equity site selection approaches.

In the context of global development, it has also been claimed that 'the extent to which specific EIA systems address environmental problems and assist with decision-making ... remains mostly unknown'⁶ and that the quality and functionality of EIA systems in some developing countries are affected by factors such as lack of administrative support and compliance and also lack of involvement of civil society.⁷

These disparate understandings and practices are particularly applicable to the context of this article, where the aim is to provide an analytical account as a platform for understanding the underlying nature and purpose of EIA in the Kingdom of Saudi Arabia (KSA), for which there is a scarcity of legal studies. Having said that the limited body of comparative literature referring to the Middle Eastern region generally reveals significant differences and discrepancies across and within countries in the quality and effectiveness of their EIAs.

Amongst the sometimes opposing perspectives highlighted by Lawrence in the quote above, it will be seen that EIA in the KSA embraces a clear set of stances. It will be argued in this article that EIA in the KSA context is viewed and practised as more of a purely environmental procedural requirement, and a technical and rational process rather than as a form of participatory, deliberative engagement. Interestingly, EIA as practised in the KSA can also be characterised by different attributes that are

3 Jha Thakur and Thomas B Fischer, '25 Years of the UK EIA System: Strengths, Weaknesses, Opportunities and threats' (2016) 61 *Environmental Impact Assessment Review* 19, 26.

4 Anne N Glucker and others, 'Public Participation in Environmental Impact Assessment: Why, Who and How?' (2013) 43 *Environmental Impact Assessment Review* 104, 109.

5 David P Lawrence, *Environmental Impact Assessment: Practical Solutions to Recurrent Problems* (John Wiley & Sons Inc 2003) 6.

6 *ibid.*

7 Thiri Shwesin Aung, Thomas B Fischer and Luan Shengji, 'Evaluating Environmental Impact Assessment (EIA) in the Countries Along the Belt and Road Initiatives: System Effectiveness and the Compatibility with the Chinese EIA' (2020) 81 *Environmental Impact Assessment Review* 6.

unique and not underscored by Lawrence, in terms of both environmental administration and the role of the environmental judiciary.

A key reason why the EIA process is vital in the KSA and indeed in many countries worldwide is to further the development of energy and climate goals and targets. The KSA is now on the verge of transforming its economy from being almost entirely fossil-fuel-based to a more diversified and investment-based low-carbon economy, through the national Vision 2030 masterplan, introduced in 2016.⁸ A significant part of this national effort is directed towards strengthening and reinforcing industrialisation and attracting international businesses (and, in the long term, foreign direct investment). The prospect of these significant changes, together with other factors discussed below, should invite policy-makers, scholars and researchers to discuss and analyse the environmental protection issues arising from these developments.

It should be noted that the regulation of environmental matters in the KSA is covered by the General Environmental Law (henceforth GEL) and that the central environment agency with overall responsibility for monitoring compliance with the GEL is the General Authority for Meteorology and Environmental Protection (GAMEP), which is part of the Ministry of Environment Water and Agriculture (MEWA). The relationship between these different players and its implications is a key element in the discussion that follows.

This article aims to provide an analytical account that will provide a platform for understanding the underlying nature and purpose of the EIA in the KSA and to what extent it aligns with or differs from the wider theoretical understandings in the international literature in these aspects. The primary contribution is to assess the current role of EIA in this Middle Eastern context. The article is based on two legal research methods. The first is a doctrinal analysis, focused on the KSA's major environmental legislation, the GEL, including its rules for implementation (RI) and Appendices. The second method is an empirical analysis, mainly grounded on the data gathered from interviews conducted with 27 respondents working in the environmental governance field in KSA. The use of interviews with key stakeholders in KSA and the analysis that follows help to fill the gaps arising from the limited amount of literature covering this context as well as allowing a novel contribution to research on EIAs.

This article explores, analyses, and scrutinises EIA as a legal environmental decision-making tool in the KSA. The methodology used and the basis of the interview questions are described in Section 2, while the nature and status of EIA in the KSA's environmental legal system is discussed in Section 3. Section 4 addresses the various practical issues regarding the EIA process and the role of the Environmental Impact Statement, perceived in the literature as the heart of the EIA process. The functionality of many aspects of EIA and on-the-ground practices by the different stakeholders, including regulators, those regulated and environmental consultancy offices is then explored (Section 5). This article finally identifies major issues affecting the implementation and applicability of the EIA and concludes by highlighting contributions made by this study and recommendations for future study.

8 'The Vision Document' <https://www.vision2030.gov.sa/sites/default/files/report/Saudi_Vision2030_EN_2017.pdf> (Saudi Vision 2030 Website, accessed 4 March 2021).

2. METHODOLOGY

2.1 Introduction

In order to systemically research EIAs in the KSA, a qualitative empirical legal study was conducted, involving a doctrinal analysis followed by an analysis of the results of semi-structured interviews.⁹ This combination of methods in a triangulation¹⁰ approach was aimed to contribute to the validity and reliability of the outcome of the research.¹¹ In the doctrinal analysis, a range of legislation and legal instruments was considered, applying a black-letter-law approach as a form of doctrinal methodology.¹² Despite some criticism,¹³ this traditional legal methodology is useful in extracting and identifying inherent principles, rationales, and values from legal cases and legislation, since it is extensively predicated on raw legal materials, such as constitutional provisions,¹⁴ laws and judicial decisions.¹⁵

The semi-structured interviews were conducted to obtain original insights into the subject matter of the context and to confirm the validity of the issues identified in the doctrinal analysis. The concerns raised by the interviewees matched or illustrated the consequences of some weaknesses in drafting and issues regarding the practicalities of application identified from the doctrinal analysis. However, the findings also raise a number of issues that have not been prominently covered or are not found within the currently available literature in this area of scholarship. The remainder of this section details further the qualitative methodology used in the semi-structured interviews and identifies a number of limitations.

2.2 Semi-Structured Interviews and Analytic Themes

Although documents provide a cornerstone in reaching in-depth understanding, the use of interviews allows an entry into the insights and experience of experts and

- 9 Empirical legal studies involves a mixture of methods. As advocated by Nielsen, 'Research That Employs Multiple Tactics for Observing and Understanding Is More Reliable Than a Single Study if the Studies Are of Comparable Quality'. Laura Beth Nielsen, 'The Need for Multi-Method Approaches in Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 953.
- 10 Especially triangulation of methods and data sources. Triangulation as a concept has many dimensions; all seem to contribute positively to rigorous research. For this particular context, embracing more than one methodology, even though they are all qualitative, is a form triangulation that contributes to the quality of research studies. See, for example, Uwe Flick, *An Introduction to Qualitative Research* (5 edn, SAGE Publications 2014) 182.
- 11 Michael Quinn Patton, 'Enhancing the Quality and Credibility of Qualitative Analysis' (1999) 34 *Health Services Research* 1189, 1192.
- 12 The meaning of 'doctrinal methodology' for the purpose of this research is simply to indicate a considerable reliance on legislations and legal instruments. To obtain some idea about the meaning and evolution of the term doctrinal research, methodology or method see, for example, Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 *Deakin Law Review* 83.
- 13 The doctrinal approach, as opposed to an interdisciplinary approach, has been portrayed by some as 'intellectually rigid, inflexible, and inward-looking'. Douglas W Vick, 'Interdisciplinarity and the Discipline of Law' (2004) 31 *Journal of Law and Society* 163, 164.
- 14 Resort to legal cases and court judgments and decisions is, however, minimal, given that the publication of such legal material is noticeably limited and not linear in the KSA.
- 15 Mike McConville and Wing Hong Chui, 'Introduction and Overview' in Mike McConville and Wing Hong Chui (eds), *Research Methods for Law* (Edinburgh UP 2007) especially 1–4.

practitioners regarding the legal phenomenon being explored.¹⁶ The decision to employ interviews in this research was also driven by the relative lack of environmental and EIA governance data disclosed and documented by the relevant environmental bodies in the context under study. The potential of the interview strategy in this regard is great, since it can 'reach areas of reality that would otherwise remain inaccessible'.¹⁷ The line of inquiry,¹⁸ as well as the issue of who to interview was driven by the theoretical framework and a literature review (regarding environmental and EIA governance), as well as by the research questions, based on the themes identified in the literature review (see below in this section).¹⁹

Participants were chosen on the basis of their perceived knowledge and/or practical involvement in environmental protection circles and the environmental governance field in general. This required first identifying the main agencies and institutions with a clear involvement in the dynamics of environmental protection. Based on the types of institutions identified, interviewees were classified into four categories as:

- Bureaucrats or civil servants (I-A)
- Representatives from industries and the private sector (I-B)
- Academics (I-C)
- Representatives of environmental societies (I-D)

It should be noted that due to the way the environmental societies are staffed (mainly with experts and specialists already practising in their own field) and the requirements of their foundations, representatives from the (I-D) category were also categorised as belonging to other groups, such as (I-C), where they had other roles. Initially 40 participants were targeted, based on the four identified categories;²⁰ however, only 27 of these were available.

Nevertheless, representatives from each of the principal environmental bodies were interviewed. These institutions included the MEWA and the Environment Agency (GAMEP), the Ministry of Municipal and Rural Affairs, and the Environmental Protection Departments of both the Royal Commission for Jubail and Yanbu (RCJY) and the Saudi Industrial Property Authority (MODON),²¹ as

16 Lisa Webley, 'Qualitative Approaches to Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 936

17 Anssi Peräkylä and Johanna Ruusuvoori, 'Analyzing Talk and Text' in Norman K Denzin and Yvonna S Lincoln (eds), *The Sage Handbook of Qualitative Research* (4th edn, Sage Publications 2011), 869.

18 Facilitating the pursuit of the line of inquiry was the leading purpose of the interview guide, which contains the set of question posed to the different interview respondents. See, for instance, Michael Quinn Patton, *Qualitative Research and Evaluation Methods* (3rd edn, SAGE Publications 2002) 343.

19 Ben K Beitin, 'Interview and Sampling: How Many and Whom' in Jaber F Gubrium and others (eds), *The Sage Handbook of Interview Research: The Complexity of the Craft*, (2nd edn, SAGE Publications 2012).

20 Ethical approval was carried out with the University of Leeds (in particular, reviewed by the ESSL, Environment and LUBS (AREA) Faculty Research Ethics Committee) where both researchers were based at the time.

21 RCJY and MODON are supervisory authorities for industrial cities/zones. One of their main purviews is environmental protection, with some differences in remit between them. Thus, despite having MEWA

well as representatives from major national industries and companies, in addition to professors from principal universities in the KSA. Thus, the participants represented a broad range of specialisations or fields of scholarship, including environmental science, environmental engineering, petroleum engineering, biological science, nanotechnology and toxicology, civil engineering and environmental international relations. It should be noted that there was no opportunity to interview environmental lawyers, as this specialisation has not so far gained currency and attracted researchers wishing to specialise in this area.

Most of the interviews were conducted face-to-face; one participant preferred online correspondence and two others favoured telephone interviews, due to their practical commitments. The interviews were undertaken, translated, transcribed and analysed during the period 2016 to 2018. The analysis involved identifying and categorising the text. This was carried out by using NVivo software and English translations of the Arabic transcripts of the original audio files.

The interviewees were asked a total of 35 questions, which sought to elicit the participants' views on different aspects of environmental governance in the KSA and its effective application of EIA. These questions were based on key themes that emerged from a comprehensive literature review, including environmental governance modes, environmental governance and risks, good environmental governance, scales or levels of environmental governance, trends in environmental governance, environmental governance and societal actors, environmental governance and the unique characteristics of environmental problems and environmental principles.²² The majority of participants and practitioners interviewed were not aware of the academic and scholarly terminology existing in the literature, such as environmental modes, environmental governance/good environmental governance, environmental actors or even environmental principles. Thus, the questions posed were formulated in an explanatory fashion for the sake of clarity for participants. For instance, in investigating environmental modes, the question spelled out what these might be, was thus: 'From your perspective, what are the prevailing modes/approaches to environmental governance? Hierarchical (top-down) (eg such as command and control), Market-based (eg the use of fiscal tools and pricing for environmental protection ends), network governance (where interdependent members of the society (actors) are tied by relational trust and mutual interest voluntarily), or other? And why is this the way they do in KSA?' In another example, a question regarding good environmental governance and EIA was framed thus: 'In your view, are environmental bodies and environmental decision makers being continuously informed, in a learning-oriented way, through channels of information (for instance, about the science behind the decisions they are taking)? If so, how effective is this process?' This need for explanation rendered the process of interviewing quite time-

(notably represented by GAMEP) as the main environmental institution, due to the special expertise and operations carried out in such industrial cities, their oversight, including environmental affairs, is mandated to these specialised entities. This reflects the fractured nature of the environmental protection scene.

22 Due to space limitations, two themes, 'trends in environmental governance and the unique characteristics of environmental problems', are not directly included in this article's discussion.

consuming, to the extent that some interview sessions consumed more than 3 hours or were even completed in two parts on different days.

The semi-structured style of interview allowed respondents flexibility to depart from the question and to raise and discuss issues they deemed relevant. This allowed identification of issues and challenges that were, in many cases, surprising to the researcher and have no prominent equivalent in the leading Western literature on environmental law and governance. This paves the way for a theoretical and scholarly extension in the field of environmental and EIA law, enabling the literature to be discussed in a different, perhaps unique, contextual reality in this distinctive Middle Eastern jurisdiction.

2.3 Limitations of the Interview Process

Researchers who decide to employ qualitative interviewing methods for obtaining knowledge should not underestimate their personal role in the interaction between them and the interviewees.²³ Conducting in-depth interviews is not a one-way flow. Mason, for instance, suggests that the interviewee is a co-producer of understanding, hand in hand with the interviewees.²⁴ Accordingly, although the interviewer's level of awareness of the local issues as well as his familiarity with the general literature helped him to probe and follow up participants' comments, this was not achieved to the same degree amongst the different groups. In general, it was found easier to probe and instigate discussion with academics. This was largely due to the interviewer's affiliation to a well-known local university which promoted a mutual sense of collegueship between participants of this category and the researcher.

It was particularly important to build up sufficient trust for the interviewees to impart their own views on the organisation and context within which they worked. This involved posing the questions in an unbiased manner and carefully considering ethical issues.²⁵ To obtain deep, practical, and reliable data, the aim was to interview senior employees who were at the managerial level in the environmental domain. The main challenge in this regard was accessibility to such experts; however, as mentioned above, the researcher's own status as an academic helped in this regard.

This was also confirmed by a letter from the School of Law, KSU explaining that the research was only for academic and publication purposes, and to enrich the national and international literature. In addition, the information sheet and Interviewee Consent Form provided for potential participants were reviewed and revised by the University of Leeds, as explained above. These documents pledged, inter alia, confidentiality and anonymity for participants and potential interviewees were assured that that the process of the research and interviews adhered to academic ethical principles, and were not, for example, conducted for media excitement.

Having said that potential participants were not equally willing to take part, as the refusal rate shows. Nevertheless, it is believed that these strategies eased the accessibility and process of interviewing and encouraged participants to speak largely freely and frankly. The quotes cited in this paper might also indicate that the interviewees

23 Jennifer Mason, *Qualitative Researching* (2nd edn, SAGE Publications 2002) 62–63.

24 *ibid*

25 Robert K Yin, *Case Study Research: Design and Methods* (5th edn, SAGE Publications 2014) 110.

felt they could be remarkably open with the researcher and felt free to reflect, comment and even critique.

This is not to say, however, that we can be sure that all participants were speaking without reservations at all times. It is conceivable that some participants were reluctant to reveal all the information they knew about the organisations they represented. Thus, some respondents might have been inclined to understate or overstate a situation in their responses, neither to spoil the image of certain entities nor to exaggerate a negative situation regarding institutions with whose actions they were not in total agreement. Although recruiting a larger number of interviewees than the 27 participants might have been more enriching to the findings of this research, it is believed that the crux of the research is not exclusively or predominantly interview-based, but that the doctrinal and documentary analyses are equally important in this research.

There are also limitations concerning the subject matter of the research. Although the research examined prominent, principal, and thematic issues of environmental governance, a number of components and relevant issues have been either omitted or not comprehensively discussed in this article, due to time constraints and word limits, particularly in relation to the topics of environmental justice and enforcement.

The specific focus of this study on the KSA means generalisability of the findings and outcomes should not be taken for granted. For instance, the practitioners interviewed were involved mainly in the KSA's environmental governance context, rather than those of other Middle Eastern countries. Moreover, the questions posed were confined to the context of KSA, and not expanded to the whole region systematically. This does not, however, rule out any potential lessons and benefits for other states and systems, notably those Middle Eastern and neighbouring states that might have a degree of similarity with the KSA in some aspects.

3. THE ROLE OF EIA IN THE KSA

3.1 Background to the KSA's Environmental Governance System and the Development of the EIA

As explained in the introduction to this article, the KSA's major environmental legislation is the GEL, which is accompanied by a document known as RI, and Appendices, containing detailed provisions about implementation of the GEL. These documents include details of the EIA process and the specific forms that need to be filled out in certain cases. The agency with overall responsibility for monitoring compliance with the GEL is the central environment agency, GAMEP. This body is now part of the MEWA, which was newly established in 2016 as part of the implementation of Vision 2030. The country also has locally mandated regional authorities responsible for major industrial regions. These include the RCJY and MODON.

The introduction of the EIA scheme into the KSA's environmental governance domain in 2001 was a quantum leap that enhanced the role of the environmental law in producing better environmental protection outcomes. However, in fact, EIA arrangements had existed since the 1990s, prior to the issuance of these environmental statutes, though with only 'guidance/guiding terms'.²⁶ This type of evolution,

26 (I-A-4) and (I-A-2).

which was triggered by the influence of interaction with the international market, is not in full harmony with the picture in the available literature. The introduction of EIA into legal systems of the developed nations is depicted to have followed one of three patterns: via new environmental legislation to be enacted at once, through parliament, as a general 'decision' with details left for the time of application, or by improving existing practices, legislations or planning schemes.²⁷ Although the last pattern might appear somewhat similar to piecemeal development of the KSA's EIA, it was driven mainly by the presence of the international market, rather than, by regional influence (as in the case of some of the EU countries, for example).

The literature also records that the initiation of EIA in some industrialised countries was based on a search for rational, objective, and value-free environmental decisions, such as in the case of the UK, based on an EU directive, whereas in relatively later stages of its development EIA was perceived more as a tool to encapsulate value-laden, subjective considerations and trade-offs for environmental decision-makers.²⁸ Such developments were initially driven by the public and politicians and health professionals in response to human activities and urbanisation and other anthropocentric phenomena.²⁹ Interestingly, the trajectory in the KSA was clearly different. The EIA's piecemeal introduction was quite environmentally pragmatic and left no room for the differing theoretical perspectives identified by Lawrence and others.³⁰ Thus, as a mode of governance, in its current shape, in the KSA context, the EIA is largely of an administrative nature, in a hierarchical design that is predominantly centred around the discretion of GAMEP.

Its original introduction in the 1990s was mainly triggered by the positive input from international businesses, which for different reasons, including their international corporate image, provided their own EIA studies without these being legally demanded at that time. These initiatives were nevertheless welcomed and embraced by the KSA as an environmentally affirmative step, which was in line with the government's policy. This externally driven initial development explains the discrepancies between the documents or studies that refer to EIA beginning in the KSA in the 1990s,³¹ versus those which argue that commencement was only in 2001.³² It also explains the claims by commentators that EIA in the KSA 'was introduced with insufficient staffing, experience and monitoring, with evaluation inadequacies and without enough baseline data'.³³

27 Norman Lee, 'Environmental Impact Assessment: A Review' (1983) 3 *Applied Geography* 5.

28 Joe Weston, 'EIA, Decision-making Theory and Screening and Scoping in UK Practice' (2000) 43 *Journal of Environmental Planning and Management* 185.

29 <<http://generic.wordpress.soton.ac.uk/gem/unit-2/2-1-origins-and-history-of-environmental-assessment-ea/>> (accessed 25 May 2020).

30 David P Lawrence, *Environmental Impact Assessment: Practical Solutions to Recurrent Problems* (John Wiley & Sons Inc 2003) 6.

31 Al-Ghazi, Taha MHR, UN. ESCWA, Council of Arab Ministers responsible for the Environment, UNEP, UN. Department of Economic, and Social Affairs <<https://digitallibrary.un.org/record/466247?ln=en>> (accessed 25 May 2020).

32 Nasser S Al-Azri and others, 'Comparative Evaluation of EIA Systems in the Gulf Cooperation Council States' (2014) 32 *Journal Impact Assessment and Project Appraisal* 136.

33 Habib M Alshuwaikhat, 'Strategic Environmental Assessment can help solve Environmental Impact Assessment Failures in Developing Countries' (2005) 25 *Environmental Impact Assessment Review* 307, 311.

An issue regarding scale involves the institutions actually involved in the EIA process. Generally speaking, it can be said that the GEL and RI distinguish only 'the Competent Agency' (CA), meaning the Environment Agency itself, and 'the Licensing Institution' (LI),³⁴ where the LI refers to any institution that is responsible for permitting any project or development that is likely to have adverse impact on the environment. This can be contrasted with the international literature, which reveals a wider scope of institutional engagement in this regard. For example, EU Article 6(1) of EIA Directive 2014/52/EU (which amended Directive 2011/92/EU commands member states to take measures to guarantee that 'the authorities likely to be concerned by the project by reason of their specific environmental responsibilities or local and regional competences are given an opportunity to express their opinion on the information supplied by the developer'.³⁵ The drafting here is obviously more encompassing than the CA and LI formula in the GEL and RI. Moreover, the notable absence of the environmental statement 'stage' of EIA in the KSA's drafting has contributed to lower levels of engagement by stakeholders due to less availability of environmental data in the hands of bodies 'likely to be concerned by the project', as will be discussed further below. The relation between the LI and the CA has led to the countrywide practice of referring projects to private environmental consultancy offices that are specialists in undertaking and providing EIA studies. The drawbacks of this relationship are discussed below, in the analysis of the interview findings, particularly in Section 5.4.

The next two sections of this article aimed to highlight the practical challenges and identify important aspects concerning the on-the-ground practices and application of EIA in the KSA context. Thus, this part of the article is largely based on the responses generated from the interviewees across the four different categories, but also engages with theoretical accounts and scholarly discussions from the EIA literature. Interestingly, the kinds of challenges identified can largely be seen as contextual challenges that have currently almost no equivalent in leading jurisdictions. The existence of such specific challenges should not be surprising, because EIA is 'a multifaceted decision-making process',³⁶ and it has already been observed in the literature that EIA provisions vary considerably over nations and timespans.³⁷

3.2 Definitions of EIA

The term EIA can be elusive, indicating quite different things and addressing various breadths of scope. In this article, the term indicates the project-level type of environmental assessment, at the administrative level, excluding, for example, the policy or strategic levels of environmental assessment. The reason for focusing on this level is because it is the only kind of environmental assessment that is currently in operation in the context of this research. Thus, unlike the broad use of

34 See art 1 of both.

35 Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment [2014] OJ L124/1.

36 Prasad Modak and Asit K. Biswas, *Conducting Environmental Impact Assessment for Developing Countries* (United Nations University Press 1999) 13.

37 Norman Lee, 'Environmental Impact Assessment: A Review' (1983) 3 *Applied Geography* 5, 7.

EIA 'as an umbrella term that captures the essential idea of assessing proposed actions (from policies to projects)',³⁸ which can be found elsewhere in internationally oriented discussion on EIA,³⁹ the focus of this article is on the national-level application of the EIA.

As is the case in other jurisdictions, the EIA system in the KSA is not intended to obstruct development or investments from taking place per se, but rather to manage risk. Thus, it attempts to envisage in advance and anticipate any unfavourable environmental consequences of imminent or proposed enterprises, in order to pre-empt such effects, either by forestalling and avoiding them or by reducing them to the smallest degree practicable. In the general literature, the EIA is seen as an important tool or procedure to inform decision-making regarding industrial or urban development and to assist entrusted parties such as public bodies and the developer 'to meet their own environmental standards, to minimise environmental impacts and facilitate the approval process'.⁴⁰ In other words, it is a tool or 'procedure for ensuring that the likely effects of new development on the environment are fully understood and taken into account before the development is allowed to go ahead'.⁴¹

The definition embodied by the GEL evidently reflects this purpose. EIA is specified as: 'A study conducted to determine potential or actual environmental effects of a project and appropriate measures and means to prevent or limit adverse effects and achieve or increase the project's positive outcome for the environment in line with applicable environmental standards'.⁴² Accordingly, the EIA system in the KSA is doctrinally centred purely around objective environmental considerations and has the exclusive focus of environmental appraisal. In this perspective, it is evident that understandings in other parts of the literature that conceive the EIA regime as an intrinsically 'subjective' vehicle for social learning, fostering dialogue and cultural change, and equally encompassing social and economic issues⁴³ are irrelevant. The KSA's EIA arrangement avoids this broader conceptualisation, on the grounds that it deviates from the basic environmental protection ends of the EIA. Hence, cultural dialogue, social learning and exchange of sustainable development values are exercised separately, in dedicated institutions, such as the King Abdulaziz Center for

38 Richard K Morgan, 'Environmental Impact Assessment: The State of The Art' (2012) 30 *Impact Assessment and Project Appraisal* 5, 5.

39 See for instance, John H Knox, 'The Myth and Reality of Transboundary Environmental Impact Assessment' (2002) 96 *American Journal of International Law* 291 and Tseming Yang and Robert V Percival, 'The Emergence of Global Environmental Law' (2009) 36 *Ecology Law Quarterly* 615.

40 Barbara Carroll and Trevor Turpin, *Environmental Impact Assessment Handbook: A Practical Guide for Planners, Developers and Communities* (2nd edn, Thomas Telford 2009) 1.

41 ODPM, *Environmental Impact Assessment: A Guide to Procedures* (Thomas Telford 2000).

42 This is the official translation by the Bureau of Experts at the Council of Ministers from their website. Interestingly, however, the translation of the definition of the EIA in art 1, Item 27 of the RI provided by GAMEP, although somewhat similar, is distinctly different: 'the study conducted to identify the potential or consequential environmental impacts of projects, the procedures and appropriate methods to prevent or minimize the negative impacts and increase or achieve positive outputs of the project on the environment, in line with the applicable environmental standards'.

43 Hugh Wilkins, 'The Need for Subjectivity in EIA: Discourse as a Tool for Sustainable Development' (2004) 23 4 *Environmental Impact Assessment Review* 401.

National Dialogue,⁴⁴ rather than through pragmatic environmental protection means as such.

Before embarking on the analysis of the definition provided in the GEL, it should be noted that the definition of an EIA does not merely characterise its practical procedures or appearance but also reveals other theoretical and conceptual attitudes behind it, which are reflected in its application.⁴⁵ Along with the purpose of predicting and pre-empting potential environmental impacts, many definitions in the literature underscore the issue of collecting and communicating the data on which EIA stands.⁴⁶ It is notable that this information-highlighting element is absent from the definition in the GEL and other parts of the EIA system, as will be further discussed in Section 4.4. Again, this is highly relevant in terms of the context, where a perceived cornerstone of national EIA legislation, which is the environmental statement (or environmental impact statement), is not evident.

One interesting element of this definition, however, is that, unlike the case in many leading environmental jurisdictions, it does not restrict the need for EIA to major projects that may have considerable or significant environmental impacts.⁴⁷ This is consistent with other central EIA provisions in the GEL, as will be seen below. Thus, an important strength of the KSA's environmental governance is that, at the doctrinal level, the requirement for EIA is not confined only to large-scale developments that will obviously have a significant environmental impact. However, according to the findings of this study, the situation in practice is quite different, as will be discussed below.

Most critically, this open definition of the KSA's EIA regime does not accentuate what are perceived in other legislation and in the general literature as key characteristics of EIA systems. These include the systematic nature of EIA, and its methodical and standardised procedures, as well as the bias-free quality of the environmental data on which the EIA procedures should depend,⁴⁸ which are conceived by some authors to be the distinguishing merits of

44 'King Abdulaziz Center for National Dialogue' <https://www.my.gov.sa/wps/portal/snp/pages/agencies/agencyDetails/AC363/!ut/p/z0/04_Sj9CPykssy0xPLMnMz0vMAfljo8zivQIsTAWDDQz9LQwNzQwCnS0tXPwMvYwNDz0g1Pz9L30o_ArAppiVOTr7JuuH1WQWJkHm5mXlq8f4ehsbGasXSDtHg4Au7FKQA!!/> (Unified National Platform Website, accessed 16 October 2020).

45 See David P Lawrence, 'The Need for EIA Theory-Building' (1997) 17 *Environmental Impact Assessment Review* 79. However, extensive abstract or theoretical analysis regarding EIA falls outside the scope of this article.

46 See the definitions quoted by Glasson in John Glasson, Riki Therivel and Andrew Chadwick, *Introduction To Environmental Impact Assessment* (3rd edn, Taylor & Francis 2005) 2.

47 The general perception in leading jurisdictions is that the assessment is only relevant when the effect of the respective project is qualified to be 'significant'. Therefore, . . . projects likely to have significant effects on the environment are made subject to an environmental assessment. European Commission, 'Environmental Assessment' <http://ec.europa.eu/environment/eia/index_en.htm> accessed 4 March 2021. Emphasis added.

48 The systematic nature of the EIA is a defining character throughout its history. Durning, Palframan and Perdicoulis argue that 'EIA is systematic process which has been practised for more than 40 years'. Bridget Durning, Lisa Palframan and Anastassios Perdicoulis, 'Introduction' in Bridget Durning, Anastassios Perdicoulis and Lisa Palframan (eds), *Furthering Environmental Impact Assessment Towards a Seamless Connection between EIA and EMS* (Edward Elgar 2012) 2.

EIA.⁴⁹ In practice, this omission in the GEL seems to have led to considerable discrepancies exist in the realm of EIA and its decisions, as will be seen in the empirical findings.

Another significant aspect of the GEL's definition is that, in terms of the actors involved, it does not decisively state who is in charge of carrying out this study and meeting the expenses incurred on one hand, and who must ensure it is pursued and fulfilled on the other hand, nor the role of the judiciary. As is the case in other jurisdictions, EIA in the KSA does not dictate or automatically lead to a certain decision or substantial outcome, but is more of a procedural mechanism.⁵⁰ However, the assumption behind EIA's portrayal in the literature as 'improving environmental sensitivity of decisions'⁵¹ does not sit easily with the practices as revealed in this study, including those of its Environment Agency (GAMEP) and the actual operation of the EIA system, as will be elaborated below.

Although the literature stresses that discrepancies in understanding and implementing many aspects of EIA do usually exist amongst stakeholders in different sectors,⁵² the overall responses by participants in the context of this article revealed particularly drastic discrepancies. Different perceptions and understanding of the same EIA law appeared to exist even within the same categories of participants.

3.3 Does the EIA Have a Special Status in the KSA?

With the lack of other assessment schemes, such as strategic environmental assessments (SEAs)⁵³ and other environmental management tools, including environmental risk assessment, environmental auditing and cost-benefit analysis,⁵⁴ EIA is so far the legalised environmentally oriented assessment procedure infrastructure in the KSA. However, the technological and human resources at the disposal of the environment agency (GAMEP) are not yet sufficient to attain the goal of obtaining sound, up-to-date environmental information⁵⁵ regarding the constantly increasing industrial and construction operations, as affirmed by participants across different

49 As McGillivray and Bell put it 'The innovation behind the EIA . . . is the systematic use of the best objective sources of information and the emphasis on the use of the best technique to gather that information'. Stuart Bell and Donald McGillivray, *Environmental Law* (7th edn, OUP 2008) 432.

50 Elizabeth Fisher, Bettina Lange and Eloise Scotford, *Environmental Law: Text, Cases, and Materials* (OUP 2013) 848.

51 Maria Lee, *EU Environmental Law: Challenges, Change and Decision Making* (Hart Publishing 2005) 171.

52 Thakur and Fischer (n 3) and Michael Robinson and Alan Bond, 'Investigation of Different Stakeholder Views of Local Resident Involvement during Environmental Impact Assessments in the UK' (2003) 5 *Journal of Environmental Assessment Policy and Management* 45.

53 There are big differences between SEA and EIA. Generally, the key difference can be said to be that, while SEA is concerned with thematic strategies and decisions that precede projects and developments, EIA focuses on the details of a certain project and its actual or potential environmental impacts. For more on the difference, see Thomas B Fischer, *Theory and Practice of Strategic Environmental Assessment: Towards a More Systematic Approach* (Earthscan 2007) especially 6–8.

54 Discussion about alternative mechanisms such as environmental risk assessment, environmental auditing, cost-benefit analysis can be found in Judith Petts, 'Environmental Impact Assessment Versus Other Environmental Management Decision Tools' in Judith Petts (ed), *Handbook of Environmental Impact Assessment: Environmental Impact Assessment: Process, Methods and Potential*, vol 1 (Blackwell Science 1999) especially 34.

55 As stressed by Çelik and his colleagues, 'EIA is a formal method of judging the potential consequences of proposed development projects would have on the environment and its members.' Tolga Çelik and

groups.⁵⁶ These factors render EIA more akin, in some cases, to an 'ad hoc procedure' than a well-established mandatory legal requirement, a situation that is not unique in developing EIA systems.⁵⁷

These and other factors place special weight on the status of the EIA regime, which is of paramount importance for the state's environmental protection endeavours. Securing a tight, effective and stringent EIA regime would facilitate the work of environmental bodies, notably GAMEP, in acquiring adequate environmental information, which is a fundamental precondition for delivering GAMEP's remit. In the next sections, the different procedures and phases comprising the EIA system in the KSA are examined alongside their counterparts found in the international literature.

4. THE PHASES OF EIA IN THE GEL

4.1 Introduction

As pointed out above, the status of the EIA as the keystone of the KSA environmental regime places special importance on it as explained above. However, a close examination of the procedures employed and the terminology used shows distinction from those commonly identified in the wider literature. For instance, the stages or steps of EIA prescribed by Fisher, Lange and Scotford include screening, scoping, preparation of the environmental statement, public participation through welcoming comments from the public, and the decision and determining whether the proposed project should proceed or otherwise.⁵⁸ Another more detailed example is the flow provided by Gilpin, which involves: status, scoping and data assembly, consideration of alternatives, review of proposed mitigation measures, screening, communication, the decision and, finally, monitoring.⁵⁹ However, these procedures do not perfectly describe EIA as it operates in the KSA context.⁶⁰ Moreover, the widely accepted procedures and steps of EIA are embedded in several dispersed Articles and sub-Articles, notably of the GEL and its RI, which are identified here and constitute an essential part of the focus of the discussion in this article, and an important part of its contribution.

others: 'Social Cost in Construction Projects' (2017) 64 Environmental Impact Assessment Review 77, 84.

56 (I-A), (I-B), (I-D) and (I-C)

57 John Glasson and Nemesio Neves B Salvador, 'EIA in Brazil: A Procedures–Practice Gap. A Comparative Study with Reference to the European Union, and Especially the UK' (2000) 20 1 Environmental Impact Assessment Review 191.

58 Fisher, Lange and Scotford (n 50) 847–48.

59 Alan Gilpin, *Environmental Impact Assessment: Cutting Edge for the 21st Century* (Cambridge University Press 1995) 4.

60 It should be noted that despite some similarity in many cases, different scholarly discussions in the literature often formulate the steps of the EIA quite differently. See, for example, the difference between the depiction of the EIA steps above by Fisher and others on one hand, and by Middle and Middle on the other hand, in Garry Middle and Isaac Middle: 'The Inefficiency of Environmental Impact Assessment: Reality or Myth?' (2010) 28 Impact Assessment and Project Appraisal 159. See also the definition or the steps prescribed in Marlene de Witt and others, 'Biodiversity Offsets in EIA: Getting the Timing Right' (2019) 75 Environmental Impact Assessment Review 1, 2.

4.2 Screening

Screening tackles the questions regarding which projects should be subjected to EIA and on what basis.⁶¹ The answer is determined by how the project-undertaker or developer is instructed to conduct an EIA and by whom. Although the delineation is unclear on the doctrinal 'legislation level', as pointed out in the previous section, this delineation is better when it comes to the practical application of the GEL, where the EIA applicant is clearly instructed to follow certain procedures. In the KSA's legislation, this instruction is found in Article 5 of the GEL, which emphasises that it is the responsibility of the project-undertaker to conduct the EIA study, and the duty of the authorising or permitting authority (LI) to ensure the fulfilment of this obligation before granting the permission. With regard to which projects are required to undergo an EIA study, it states that any development with a probability to cause negative effects on the environment is to be asked for an EIA. Article 5 of the GEL reads:

Licensing authorities shall ensure that environmental assessment studies are conducted in the feasibility study phase for projects with potential adverse impact on the environment. The authority executing the project shall be in charge of conducting environmental assessment studies in accordance with environmental bases and standards specified by the competent authority in the Implementing Regulations [ie the RI].

There are a number of points worth mentioning in this context. First, although the phrase 'the authority executing the project shall be in charge of conducting environmental assessment' suggests that this provision is only addressed to public projects, in practice, even private projects with potential environmental impacts have to conduct an appropriate EIA study prior to final formal approval for establishment or operation. However, it emerged in the interviews that due to the lengthy nature of EIA studies, and as a way of encouraging businesses and investments, the licensing authority might in some cases allow investors to start their constructions or even some operations, if they have reasonable grounds to believe that the investor has genuinely already started the process for obtaining the EIA.⁶²

Secondly, and more importantly, the Article specifies that any projects with 'potential adverse impact on the environment' require an EIA. It is interesting that the Article does not narrow the scope of the EIA requirement by adding further qualifying expressions or restrictive adjectives such as 'potential', 'significant' or 'unacceptable'. In principle, this drafting in the GEL is emphatically environmentally affirmative and can be used to push for eco-centric interpretations and implementation of the EIA regime and its legal provisions, primarily by GAMEP. Having said that the extant international literature portrays EIA as not merely 'environmental',

61 'Screening is the stage where a decision is made as to whether an EIA is required for a project', Davide Geneletti and others, 'Land Take and the Effectiveness of Project Screening in Environmental Impact Assessment: Findings from an Empirical Study' (2017) 67 *Environmental Impact Assessment Review* 117, 117.

62 (I-A).

but rather more comprehensive and ‘multidisciplinary’ in nature, to include health and other equally essential considerations.⁶³

In terms of the themes of good environmental governance and actors involved in EIA, this merit of the GEL could also be boosted in the screening phase by effective and constructive interventions and contributions by the courts, for example by adopting the eco-centric interpretations mentioned above and embracing less deferential stances to the decisions of environmental bodies (the deference of courts to administrative environmental decisions will be addressed below). However, although the role of the judiciary’s contribution to the environmental protection remit was found to be a divisive issue amongst the interviewees, all four categories of respondents were in agreement regarding the lack of involvement of courts in the EIA regime in particular. This can be attributed to various causes, some of which will be addressed below in Section 5.5.

4.3 Scoping

The scoping activity asks: ‘What impacts of a project should be assessed?’⁶⁴ Thus, it determines how wide or narrow the focus of the assessment will be and what items and aspects of the intended development should be covered. In the KSA’s EIA arrangement, the answer to this question is primarily premised on the outcome of the screening decision, notably, to what ‘category or classification’ in an ascending scale the proposed project is affiliated. The higher up the scale, the more details, explanations, measures and precautions are required, incurring greater cost and burdens on the project owner or undertaker. This explains the fact highlighted by respondents from the civil service and industry categories that many EIA seekers might strive to have their project classified as low as possible. The aspects of the intended activity that will be subject to assessment in the EIA are largely fixed and identified by the RI and its Appendices. Thus, the initial decision regarding what category the proposed development belongs to is discretionary and entrusted to a public authority. In the case of privately owned projects, the project is classified according to a classification guide (Appendix No 2.1 of the RI)⁶⁵ issued by the Competent Agency (in this case GAMEP). However, in the case of a public development project, the equivalent guidance, the category is decided by ‘The public, concerned or licensing agencies which own, implement *or* operate the project . . . in cooperation with the Competent Agency.’ In terms of environmental governance modes, this further affirms the administrative nature of the EIA and its constituent parts.

The initial question ‘What impacts of a project should be assessed’ acknowledges that developments and operations have varying potential impacts on environmental assets. Thus, the GEL and RI and their Appendices classify potential projects and development and industrial activities into three categories, according to their potential

63 As put by Loomis and Dziedzic: ‘EIA is understood as a multidisciplinary tool that attempts to predict the various impacts a project will have upon its surroundings, including the biophysical, social, and health environments.’ John J Loomis and Mauricio Dziedzic ‘Evaluating EIA Systems’ Effectiveness: A State of the Art’ (2018) 68 Environmental Impact Assessment Review 29, 29.

64 Fisher, Lange and Scotford (n 50) 847.

65 Appendix 2: “Fundamentals and Standards for Environmental Impact Assessment of Industrial and Development Projects”.

impact. This initial categorisation determines many subsequent legal consequences and requirements.

The first category includes projects that are perceived to be of minor environmental impact, for which the entrusted party has to fill in the form shown in [Appendix 2-2](#) and provide merely a ‘simple preliminary report on the project’.⁶⁶ Only very generic and brief information about the project, and the applicant and the project type (eg industrial, residential, agricultural) is required. The applicant is also asked to outline some descriptive details of the project, including its location, type, and the source of energy used.

Developments falling under the second category are assumed to have a greater impact on the environment; thus, the scope of assessment and the requirements and conditions for this type of project are more elaborate and stringent in quality and quantity. To fulfil these conditions, the entrusted party⁶⁷ must: ‘Have a qualified consulting office qualified [ie approved] by the Competent Agency or any approved agency by the Competent Agency or any research center complete the initial environmental assessment form for second category projects’ . . . and also ‘prepare a summarized technical environmental report on the project’.⁶⁸

However, the difference between the ‘simple preliminary report’ required in the case of first category projects, and the ‘summarized technical environmental report’ demanded from second category developments is not made explicit by the legislation. The general understanding is that the higher the rank of the potential environmental negative impact of the intended activity, the more details and clarifications are expected to be furnished in this report. As no definition of these is provided, the understanding of the content and level of detail needed in each report and the judgment of their adequacy is developed by practice and everyday experience. In all cases, GAMEP, as the competent agency, has the final word on judging the quality and sufficiency of the data provided for the different reports in relation to their classification.⁶⁹ Remarkably, there is no obligation on any party, including GAMEP, to publicise such data to other societal actors, or to invite third party comments.⁷⁰ Here, a distinction can be recognised between the EIA in this context versus that represented in the literature.

A development that falls into the third category of development requires the widest and most thorough scoping process, due to the gravity of its potential impact. According to Appendix 2 of the RI, the in-charge party must, inter alia:

66 Appendix 2, Item 1.3/ First Category.

67 I call them the ‘entrusted party’ because it could be the project owner, the implementer, the operator or others; whether the project is public or private has a role in deciding this.

68 Appendix 2, Item 1.3/ Second Category.

69 This, and whether to take the EIA outcome into consideration for producing the final decision regarding the potential project, is an entirely formal and administrative exercise, and thus dependent on the respective environmental body’s volition, in this case GAMEP. This ‘formal character’ of evaluating and decision-making on environmental risks has brought some critique by some pundits. See, for example, Nicolas De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (2nd edn, OUP 2020) P 341.

70 Alshuwailhat (n 33).

Employ a qualified consulting office approved by the Competent Agency or any research center [approved by the Competent Agency] to conduct an environmental assessment study for the project in accordance with the guidelines for the development of an environmental impact assessment for industrial and development projects (Appendix 2.4) . . . and the agency in-charge of implementing the project shall be obliged to refer back to the Competent Agency for coordinating in preparing the study.⁷¹

Examination of Appendix 2.4, which is dedicated to the third category projects, shows that no preparation of any kind of reports is demanded. Rather, the entrusted party is required to carry out a comprehensive study about the respective projects, including specification and explanation of the project, its purpose, the surrounding environment and atmosphere, and the anticipated environmental consequences on every aspect of the environmental media. This provides significant room for the involvement of environmental consultancy offices, which will be discussed in Section 5.4.

4.4 The Environmental Statement

As mentioned above, throughout the legislative procedures and steps in the KSA's EIA there is nothing that could be technically recognised as an 'environmental statement'. This was reflected in the interviewees' comments: although they were aware of EIA as a legal requirement, none of the interviewees seemed to have an adequate awareness of this key feature of an EIA. This aspect of EIA is also absent from the on-the-ground practice by the parties involved, mainly GAMEP. In contrast, the environmental statement is portrayed by the international literature as a 'must'⁷² have feature of EIA and the 'cornerstone of the regime'.⁷³ It is, thus, widely regarded as a *bedrock* of EIA procedure in many Western jurisdictions, including the UK⁷⁴ and as an important element of good environmental governance and as facilitating the associated transparency for societal actors. Interestingly, neither the GEL nor the RI stresses the participatory aspect of EIA, even in the case of activities with the greatest potential environmental impact.⁷⁵

Thus, in the KSA's style of EIA scheme, there is technically no such thing as a specific 'environmental statement', although generally 'environmental information' is compiled by the project owner or more precisely the hired private firm. Moreover, unlike the situation in some Western EIA arrangements, neither the GEL nor the RI provide for the environmental statement or the 'environmental information' gathered to be commented on by third parties, such as other public authorities, environmental

71 Appendix 2, Item 1.3/ Third Category.

72 Stuart Bell and others, *Environmental Law* (9th edn, OUP 2017) 470.

73 Lord Bingham in *Berkeley v Secretary of State for the Environment, Transport and the Regions* [2001] Env LR, 16.

74 RJ Heffron and F McManus, 'Environmental Impact Assessment' (2016) 20 *Environmental Law in Scotland* 1.

75 This and other environmental aspects are likely to be reviewed and improved in line with Vision 2030. The trend of environmental law development has already started by mitigating the fragmentation of environmental bodies through the combination of GAMEP into the newly established MEWA.

societies or, perhaps more importantly, by individual stakeholders. This is despite the fact that these external parties might have pertinent and valuable environmental knowledge not available to the developer or EIA applicant.⁷⁶ As a participant in the civil servant category openly commented, 'If we're to consider the entire EIA procedure as a total of 100%, the contribution from members of the public, at its best level, will not exceed 1%.' This marginal role of third parties was explained by some participants⁷⁷ as reflecting the fact that EIA is a technical and specialised environmental undertaking in which unspecialised persons have little interest. That said, there is no legislative prohibition against individuals seeking a friendly discussion and making contributions that may feed into the procedure of the EIA.

This contrasts with the situation depicted by the international literature, where there is not only an invitation to the public to take part in the EIA process but also an obligation to make sure that the information shown in the environmental statement is readable and comprehensible by lay persons.⁷⁸

In practical terms, the lack of involvement of other societal parties affirms the essential role of the hired (by the developers) consultant environmental firms in the KSA, and of GAMEP as the competent authority to oversee the function and outcome of the entire EIA regime and thus define and shape the procedure of the EIA system. Furthermore, this lack of external actors in the steps of the EIA also extends to the role of the judiciary, which appears peripheral with regard to EIA practice, as will be further discussed in Section 5.5.

5 DISCUSSION OF ISSUES RAISED IN THE INTERVIEWS AND PRACTICAL IMPLEMENTATION OF EIA IN THE KSA

5.1 Issues Resulting from the Development Process of the EIA Scheme in KSA

As mentioned above, the original introduction of the EIA scheme prior to the adoption of the obligatory KSA environmental law can be credited to the positive influence of the international market on the domestic legal sphere,⁷⁹ as some international enterprises were required by their central management or international boards to obtain an EIA certificate before operating their proposed projects in any country. As explained by an interviewee⁸⁰: 'By that time, many requests for EIA had been addressed to us by international businesses wishing to operate in the KSA. Obviously not because they were nationally legally-binding, in fact they were not. But because their internal reasons and requirements from their international leadership, or for their international market-related considerations.'

76 See discussion in Stephen Tromans, *Environmental Impact Assessment* (2nd edn, Bloomsbury Professional 2012), especially discussion on compilation of environmental statement 179–80.

77 Including one in (I-A).

78 'a non-technical summary of any information supplied must also be provided, enabling [a] non-expert to understand its findings. It seems clear from recent case law that this document must not be overly complex for the general public to access . . .', Bell and others (n 72) 471.

79 This is very much consistent with the wide agreement of respondents amongst all four categories on the considerable influence of international trade or the international level of environmental law on the development of the national environmental governance arena.

80 In group (I-A)

The piecemeal introduction of the EIA system into national environmental law was not only influenced by this 'international' aspect. Nationally, the enforcement of the GEL and RI, was also in a state of flux. Transforming non-binding instructions, guidelines and a routine or unwritten code of conduct into solid rules and legally binding practices seems to have been recognised by the legislator as a challenging undertaking with significant socio-economic implications, including on the regulated entities. Therefore, the GEL expressly offered both a statutory 'delay' for implementation, and also provided for a discretionary further 'legal postponement' of the enforcement of the GEL, and thus EIA. Article 15 of the GEL allowed a 5-year maximum grace period before enforcement for projects existing at the time of the issuance of the GEL. This term could be further extended for particular projects, based on a decision of the Council of Ministers.

The driving forces mentioned above have led to a perplexing state with regard to EIA, in that there are a many businesses and state-owned operations that were founded before the current obligatory EIA provisions came into being. These operations met the existing requirements at the time of establishment, when environmental law and EIA requirements were on the side-lines, compared to issues such as economic development. At the practical level, this brings about a great many legal and socio-economic concerns and unresolved challenges for the respective decision-makers at that time.

Hence, at the time of the 'full enforcement'⁸¹ of the GEL and the RI, there were several major and probably indispensable enterprises operating without prior EIA studies, some of which continued unable to obtain a proper EIA, as vouched for by participants from all the groups. This sparked a challenge in which the endeavours of societal stakeholders and even GAMEP to seek a radical solution, for example, by shutting down or moving such polluting operations to remote areas, have been challenged by a persistent attitude from investors, who stress that they satisfied the law and permit conditions governing at the time their operation commenced.⁸² Thus, they contend that they are unable to fulfil the 'impracticable' demands of the new regulations and argue that such unwieldy rules cannot be applied retrospectively. As one respondent⁸³ explained: 'I am aware of an example of industry that is contributing to the national need. . . the industry is now part of the city. This places challenges regarding environmental requirement such as the EIA. In order for the factory to satisfy the EIA requirement, it has to be removed remotely to a totally different area.'

It is widely understood that implementing a radical decision or terminating the operations of these economically vital industries would have significant social and economic consequences. Respondents⁸⁴ pointed out that the stability of both domestic and regional prices would be at stake, due to their capacity for supplying the national and regional market. It is clear that in such complex situations, decision-makers have many other considerations than purely environmental ones to think

81 It is still a continuing attempt.

82 As explained by an interviewee from (I-A)

83 From (I-A).

84 From (I-A) and (I-B).

about. This challenge seems to have existed even in the industrialised part of the world, where ‘already existing’ projects were similarly dealt with, although different techniques were used. In the late 1960s, the introduction of EIA into the US environmental regime confronted existing operations and constructions by large government infrastructure agencies, including transportation and energy services. The handling of the issue was, however, different. Rather than allowing a time window for existing operations (which the KSA’s EIA regulations opted for), the focus was more tilted towards asking for mitigation measures to be taken.

This prolonged period of ‘greyness’ in enforcing the GEL, particularly with regard to EIA, seems to have lost the GEL a quite considerable deal of momentum at that time. This is unlike, for example, the quite vigorous introduction of the National Environmental Policy Act (NEPA) in the USA, which led authors to label it as the ‘Magna Carta’ of environmental law in the USA.⁸⁵

According to the interviewees, the state of flux of the EIA regime is still ongoing and the EIA regime has not yet reached its maturity. In fact, almost all the interviewees remained highly sceptical that full implementation was a reality, due to issues regarding the competence, qualification and infrastructure of GAMEP, which will be the focus of the next section. Having said that, the overarching developments driven by Vision 2030, including environmentally related developments, are expected to address many of these long-standing challenges existing in the pre-Vision era.

5.2 The Lack of Environmental Capacity and Expertise

The great majority of respondents justifiably reckoned that the EIA regime in place has significant room for further improvement in the future, although even those within the same category differed in their opinions as to which aspects of the regime most needed improving. That being said, respondents across all four categories asserted either directly or indirectly that the statutorily prescribed duties and responsibilities of the central environment agency (GAMEP) far exceed its capacity and executive powers. Surprisingly, and seemingly as a result of the considerable discrepancy between GAMEP’s legislative duties and available capacity, some respondents, notably among them bureaucrats and civil servants (I-A), incorrectly believed that GAMEP is a legislative authority in the environmental domain, rather than primarily an executive authority. This kind of argument does not seem to have equivalent in the extant international literature.

Some interviewees linked the sub-optimal quality of the EIA scheme mainly to issues related to the quality of those working in the EIA domain, either within GAMEP or other licensing agencies. According to this camp, the primary causes are attributed mostly to the low level of understanding of EIA-related legal issues and lack of appreciation of the nature of the potential environmental risks posed by the proposed development. This is exacerbated by the considerable discretionary power given to civil servants in relation to the EIA requirements. This is relevant because some employees might mistakenly accept underrated categorisation of potential projects, raising concerns of inconsistency in implementing environmental law.

85 William H Rodgers, Jr, ‘The Most Creative Moments in the History of Environmental Law: “The Whats” [2000] University of Illinois Law Review 1, 23.

As mentioned in Section 4.2, the drafting of the GEL allows an eco-centric and precautionary interpretation of the EIA regime. Although this ‘open’ drafting accords the environmental bodies and GAMEP a huge margin of discretion by which they can rigorously defend the environment through a precautionary and more eco-centric application of the EIA scheme, this is not the case in practice, as is clear from the responses of participants across the four groups. This may be partly due to insufficiency of advanced infrastructure and qualified personnel in the environmental governance field in general, and especially for GAMEP, which lacks lawyers specialised in environmental or EIA law. However, more deeply, it seems to be because the quality and breadth of this drafting does not seem to be recognised and was never alluded to by any of the interviewees among all four interviewed groups. The conclusion that GAMEP lacks capacity and expertise is in line with the assertions of several interviewees across all categories, as well as in some official reports, that many of the personnel in the environmental field, and specifically in GAMEP, are in need of further training and technical equipment.⁸⁶ Some participants explicitly emphasised the existence of this challenge in the environmental law domain and with regard to the GEL and EIA in particular. An interviewee in the civil servant category, for example, explained: ‘... the final decision may vary as per who and which individual of GAMEP personnel is in charge of the file. Significant variation can exist according to the different attitudes and understanding of the respective agents. I personally rejected some projects on my consideration of their likely future impact on the environment, which might not have been declined if somebody else had considered the case instead of me’.

5.3 Private versus Public Projects and GAMEP

There seems to be a considerable dichotomy in terms of the regulatory and enforcement powers that GAMEP has over private versus government projects, although, in principle, the GEL does not discriminate between them.⁸⁷ Legally speaking, the GEL addresses public service projects such as bridge-building and road construction on exactly the same footing as it places obligations on private projects such as poultry farms. Nonetheless, it appears that there is an obvious discrepancy between GAMEP’s attitude to imposing the law on private businesses on one hand, and its lesser influence on public, government-owned projects on the other, due to the essential services they provide to the society.

Generally speaking, GAMEP appears to be far more able to impose the GEL on private sector ventures, than on public service projects, due to its relatively less powerful status, as well as the indispensability of such public services as pointed out by participants from both the civil service and academia. This view might lead some businesses to conceive the environmental agency as ‘not development-friendly’, whereas a re-current theme from the civil service respondents was that ‘we are not development-unfriendly’. This was also confirmed by one of the interviewees in that

86 The General Authority for Meteorology and Environmental Protection (GAMEP), ‘The State of the Environment: Responsibilities and Achievements’ (2017), 206 (Arabic). Translated by the first author.

87 Although the RI has different section for each, in all cases, they are similar in provisions and obligations.

category, who admitted that some employees in other licensing or public authorities ‘... might see us as a stumbling block rather than anything else!’

Moreover, the scale of the social need to establish public-benefit projects such as hospitals and roads carries far more weight than the need to found private profitable businesses. In this case, GAMEP may take recourse to pleading with the respective ministry for legal compliance, with no guaranteed outcome. This point was expressly made by some participants. One of the participants from the bureaucracy claimed that: ‘... when the applicant is an individual or private investment the process should go smoothly ... Private investor can be obliged to satisfy GAMEP’s conditions and to obtain its approval. This is not equally achievable when the development is government-owned and of a public service nature. This challenge remains insurmountable so far.’

5.4 The Central Role of Private Consultancies, and the Effectiveness of the EIA Procedure

Environmental consulting offices are accorded a pivotal function and position in the KSA’s EIA scheme. In practice, they, or their equivalents, such as endorsed environmental colleges or research centres, are engaged in almost every EIA application. In other words, the essential process of collating and compiling the environmental information that forms the bedrock of the entire EIA process and constitutes the basis of the final decision is carried out by these environmental consulting offices. Their fundamental role derives its powerful status from its legislative basis. The general tone of the RI, and especially its [Appendix 2](#) conveys that this legislative emphasis on the role of environmental consultant organisations increases with the level of the potential environmental threats and negative environmental outcomes of the intended activity. The rationale of this ‘positive correlation’ is the belief that these supposedly expert-led offices need to play a greater role in the more environmentally threatening projects, due to their presumed specialised knowledge and resources. This rationale is especially reinforced by the long-lasting perception, notably within formal circles, that the environmental domain lacks sufficient environmental expertise.⁸⁸ However, it can be questioned whether all these consulting groups are really led by adequate expertise and driven solely by environmental considerations.

Although conducting an EIA assessment is a legal requirement prior to the establishment of any project or industrial unit, there seem to be significant issues regarding the accuracy and feasibility of such assessments. EIAs are undertaken by private environmental consultancy offices, with no systemic mechanism for scrutiny and verification of their soundness and integrity, even by GAMEP, as interviewees across the categories⁸⁹ affirmed.

Furthermore, many participants across all four categories, particularly in the scholars and academics group, suggested that there were issues about the qualification,

88 See, for example, Alshuwaikhat (n 33); and Ahmad Al-Gilani, ‘Reforming the National Framework for Environmental Policies in Saudi Arabia’ (1999) 42 *Journal of Environmental Planning and Management* 253 and Ahmad Al-Gilani and Seamus Filor, ‘Policy and Practice Environmental Policies in Saudi Arabia’ (1997) 40 *Journal of Environmental Planning and Management* 775.

89 Including I-A, (I-B and I-C).

capacity and level of understanding of the EIA's requirements and purpose among the employees of such commercial consultancy offices. This was very much in tune with GAMEP's announcement that in 2017 the number of environmental consultancy offices endorsed by GAMEP fell dramatically, with 29 offices discredited, from a total of 73.⁹⁰ Among other corrective measures,⁹¹ its issuance of authorisation to such private consultancies also decreased over the same year.⁹² According to GAMEP, these measures were taken due to various failures and performance-related issues, with no further clarification given. Interestingly, these challenges seem also to exist even in advanced environmental jurisdictions, where EIA regulations have been very recently argued to be 'often misunderstood and misinterpreted'.⁹³ EIA implementation is also reported to prove challenges across the EU and to have 'generated [in the particular jurisdiction of the UK] more case law on the environment than any other area of EC or domestic law'.⁹⁴

Interestingly, these issues regarding the qualification and competence of hired private offices seem to have been recognised by the RCJY,⁹⁵ leading it to have recourse to international EIA specialists instead. Thus, the RCJY requires applicants to obtain an EIA certificate from internationally recognised specialists, with known expertise in the appropriate activity, rather than referring the potential industries to GAMEP's list of endorsed environmental consultancy offices. This was explained by a participant from the RCJY itself, who said that: 'The domestic environmental consultancy offices cannot be said to satisfy the RCJY requirement and the size and gravity of the industries and companies operate within its territory.'

Some participants, however, imputed part of the problem to GAMEP itself, on the ground that, as one academic stated, 'once a potential project has gained an EIA certificate from one of the approved offices, all that needs to be done is to submit the assessment to GAMEP, which will, most likely, in many cases be endorsed . . . without systematic and effective examination'. A respondent from the industrial sector also pointed out that 'there is no guarantee that the endorsed project will undergo the EIA again, even if there has been a major amendment of the facility or industry under question!'

Some respondents across the categories went on to point to more profound issues. According to these respondents, the legal requirement of the EIA seemed to have lost its logic. Rather than being a requirement for conducting prudent and customised studies of the potential risks brought about by different proposed projects and taking the precautionary and preventive measures to take them into consideration, it has turned into a merely procedural requirement, lacking its original purpose

90 'Penalising Different Environmental Consultancy Offices during 2017' <<https://www.pme.gov.sa/Ar/MediaCenter/News/Pages/230239-01.aspx>> (the General Authority of Meteorology & Environmental Protection (GAMEP) Website, accessed on 24 December 2019) (Arabic: Translated by the author).

91 These reforming endeavours were adopted in conjunction with the impulse of the national Vision 2030, which has a potential for enhancing the environmental governance arena in the future, not only by the technical detailed features it brings, but also due to its nation-wide impetus in all sectors.

92 See n 90.

93 Thakur and Fischer (n 3) 26.

94 Stephen Tromans and Karl Fuller, *Environmental Impact Assessment: Law and Practice* (LexisNexis 2003) 1.

95 The specialised environmental regulator for restricted industrial zones, as explained previously.

and rationale. This view is represented by an interviewee from the academic category, who suggested:

Some of these private environmental consultancy offices would have already prepared studies to be granted to clients having similar projects in order for them to initiate their industrial businesses without unneeded delay. Thus, such EIAs were, in practice, shallow or non-relevant studies that were largely prepared in advance of the application.

He also claimed that consultants would sometimes just ‘make superficial and minor amendments to previous studies’, with some changes in titles and subheadings, for example.

In addition, some participants, for example, an academic, attributed the problem to the lack of understanding of the entire procedure by some of the consultants and their prioritisation of their profitability over the original environmental considerations. It was suggested that some of the environmental consultants might advise the potential industries on how to convince GAMEP to rank them in the first of the three categories, as having the least possible environmental impact. One of the bureaucrats pointed out that the owners or employees of such consultant organisations are sometimes either current or previous GAMEP employees. According to this participant and to another interviewee in the same category, such individuals might persuade GAMEP to rank the potential project below what it really merits by negotiating and pledging to GAMEP that the potential industrial project would not exceed certain limits of production or emissions. This point raises concerns about the regulatory criteria or standards on which industrial activities are classified, if there is room for such negotiation and bargaining by the potential business owners, rather than having a systemic or less subjective ranking scheme.

Even more interestingly, some respondents, including two from the private sector, contended that they would not be surprised if some licensing institutions grant the applicants the permit to construct without strictly demanding them to refer to GAMEP. Thus, they may not appropriately fulfil the environmental-legal requirement, primarily EIA, or may be allowed to do it afterwards. This is also in line with the confirmation by participants from the civil service and academic sectors that not all businesses and activities have obtained EIAs before starting their operations.

5.5 The Role of the Judiciary in the EIA Process and Subsequent Enforcement

As explained in Section 3.2, the EIA decision-making process takes place in an administrative context and is widely undertaken by public administration institutions.⁹⁶ This entails that the judiciary has the mandate to review GAMEP’s decisions and

96 Elizabeth Fisher, ‘Environmental Impact Assessment: “Setting the Law Ablaze” in Douglas Fisher (ed), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar Publishing 2016) 427–28. This also includes the considerable discretionary power conferred on respective public authorities in several aspects of the EIA process. See John Alder, ‘Environmental Impact Assessment—the Inadequacies of English Law’ (1993) 5 *Journal of Environmental Law* 203.

apply the major sanctions prescribed by the GEL and the RI. In fact, the courts have no obvious role in any of the EIA's stages, and the respondents were in agreement that there was lack of involvement of the courts in the process and outcomes of the EIA regime. This is due to the highly technical nature of the EIA on one hand, and the lack of environmental expertise among the members of the judiciary, where there are no environmental scientists or experts among the justices, which was mentioned by participants in all the categories.

Article 20 of the 'Law of Procedures before the Board of Grievances (Administrative Courts)⁹⁷ 2013' enables the judiciary to consult experts in specialised and scientific issues. However, a number of participants stated that, in practice, it is generally deference rather than consultation. Moreover, as Justice Leventhal put it over 40 years ago, the judicial review of the work of the administration in environmental issues is particularly challenging because 'administrative implementation [is] through rules and orders rooted in technical expertise and inquiry'.⁹⁸ This explains the deference of the courts to the administrative EIA decisions by GAMEP. In a more subtle legal perspective, the peripheral judicial involvement by the administrative judiciary can be attributed to the conception by the administrative courts that the EIA steps are internal administrative *behaviours* that can hardly be challenged in front of the administrative courts. Thus, only the final administrative planning *decision* (to authorise or not to authorise), which is premised on many considerations including the EIA outcome, can be objected to in front of the administrative judiciary. This is clearly different from the discussion in the literature that portrays the EIA as having *decisional steps* that can be individually legally challenged in the courts (from the early screening to the last authorisation stage).⁹⁹

It should be noted that the engagement of the courts with the complex details of the EIA as an administrative procedure and decision is a challenge that is not unique to the Middle Eastern example of the KSA but exists to varying degrees and in different forms in other legal contexts. For example, even in some advanced European jurisdictions, challenges such as the 'incompatibility of the EIA provisions with underlying structures of administrative law'¹⁰⁰ are raised as issues that hinder judicial interaction in EIA cases and decisions. However, this does not negate the role played by the courts in the European jurisdictions, including the EU Court of Justice, to significantly advance EIA-related judgments.¹⁰¹ This role of the judicature has no equivalent in the Middle Eastern context, including, nationally, in the KSA.

97 That is, the specialised courts that is mandated to adjudicate in cases that involves public bodies as one of the parties, normally as a defendant.

98 Harold Leventhal, 'Environmental Decisionmaking and the Role of the Courts' (1974) 122 *University of Pennsylvania Law Review* 509, 510.

99 Joe Weston, 'From Poole to Fulham: A Changing Culture in UK Environmental Impact Assessment Decision Making?' (2002) 45 *Journal of Environmental Planning and Management* 425.

100 Karl-Heinz Ladeur and Rebecca Prella, 'Environmental Assessment and Judicial Approaches to Procedural Errors—A European and Comparative Law Analysis' (2001) 13 *Journal of Environmental Law* 185, 185.

101 Vanessa Edwards, 'A Review of the Court of Justice's Case Law in Relation to Waste and Environmental Impact Assessment: 1992-2011' (2013) 25 *Journal of Environmental Law* 515.

5.6 Summary

Although the modest quality of the EIA scheme currently in place was almost a matter of consensus amongst participants, the diagnosis and to what extent it was attributed to deep-rooted problems varied considerably among respondents. While some attributed the sub-optimal quality to the causes mentioned above, other interviewees linked it mainly to issues related to the quality of those working in the domain of the EIA, either within GAMEP or other licensing agencies. According to this camp, the primary causes are attributed mostly to the low level of understanding of EIA-related legal issues and lack of appreciation of the nature of the potential environmental risks posed by the applicant's proposed development. This is exacerbated by the considerable discretionary power given to the civil servants in relation to EIA requirements. This is relevant because some employees might mistakenly accept underrated categorisation of potential projects, raising concerns of inconsistency in implementing environmental law.

These challenges related to a sub-optimal understanding of the nature, purpose, and even functionality of the EIA are coupled with a lack of channels through which the public can influence the environmental decision as to whether a project should proceed. This renders a considerable amount of the international literature which views EIA as 'a vehicle for enhancing public participation in environmental decision making'¹⁰² irrelevant to the EIA regulatory framework in the studied context. Indeed, in many scholarly discussions, including those in legally oriented publications, the debate is framed largely around this aspect of the EIA, that is public participation.¹⁰³ Having said that, it is important to emphasise that the issues discussed above are likely to be dealt with by virtue of Vision 2030. A central example, is the recently introduced environmental legislation, and by-laws including an EIA by law which will replace the arrangements discussed above. However, these developments are to be addressed in future studies after the full development has unfolded by the year 2030, and beyond.

6. CONCLUSIONS

This article has explored the current EIA system in operation in the KSA as a Middle Eastern country, identifying the nature and the various procedures and steps of the EIA scheme in the KSA. The exploration of this largely uncharted territory of the KSA represents the secondary contribution of the article. The analysis was conducted in two main phases: the first was mainly doctrinal, and the second was principally premised on original empirical data gathered via interviews. Both analyses have been discussed in the light of key debates and the current state of theory on EIA in the available literature. Each principal section has identified distinct issues and concerns, contributing to better understanding of the whole EIA picture, and at the same time

102 Jane Holder and Maria Lee, *Environmental Protection, Law, and Policy: Text and Materials* (2nd edn, Cambridge University Press 2007) 548.

103 See for instance, Paul Stookes, 'Getting to the Real EIA' [2003] 15 *Journal of Environmental Law* 141. In other places the EIA is portrayed as one of the principal 'participation mechanisms'. See Benjamin J Richardson and Jona Razzaque, 'Public Participation in Environmental Decision-Making' in Benjamin J Richardson and Stepan Wood (eds), *Environmental Law for Sustainability: A Reader* (Hart Publishing 2006) 179.

identifying issues and challenges existing at both the doctrinal and legislative levels, and also at the practical and operational scale.

The article has also identified and discussed the nature and procedures of the EIA, as shaped and portrayed by the KSA's environmental law and as operated in the environmental governance ambit and examined some of the legal implications and consequences entailed. In addition, to provide a deeper understanding of some of the principal issues and challenges, the article briefly discussed the piecemeal development of the EIA regime, which not only shaped its history but also contributes to persistent ongoing issues.

In addition, certain gaps and weaknesses have been identified in the EIA system currently in place in the KSA's environmental governance framework. Taken together, the issues identified make it clear that the assertion in some of the literature that EIA is associated with 'integration, precaution, participation, prevention, proceduralization, sustainability'¹⁰⁴ cannot yet be realistically extended to this Middle Eastern context.

There are three major areas that can be identified as novel contributions by this research. The first is the observation that the EIA has already a special status in the KSA, as it remains the only environmental assessment mechanism that is explicitly enacted and backed up by in-force laws and regulations. The nature of this EIA regime can be understood as purely bureaucratic, minimally influenced by the scientific outcomes in the final product of decision-making and shaping quite different stages from those found in the practice of some other jurisdictions, notably leading western ones. Particularly, it was concluded that this highly state-centric style of EIA would be enhanced by considering the addition of environmental participatory characteristics in the future.

At the doctrinal level (ie in assessing the law explicitly), the definition of the EIA can be viewed as uniquely environmentally affirmative, in that it does *not* confine the EIA only to projects that are likely to *significantly* impact the environment in an adverse way. This could in the future be exploited by the judiciary to ensure more effective application of the EIA system. However, the definition offered still suffers from certain weaknesses, notably its omission of the 'systematic character'. Accentuating this characteristic is arguably more important in the context of the KSA than for, example, in some western advanced jurisdictions given the sub-optimal level of comprehension and understanding of the EIA system.

The second key contribution by the research is that a number of lacunae exist in the KSA's 2001 EIA legislation, which illustrate how the application of law varies internationally. One of the most interesting distinctions from comparable EIA legislation is the absence of the 'Environmental Statement' stage in the current EIA system in place, and the associated absence of collaborative environmental channels for the stakeholders to provide their feedback or comments on the statement or any aspects of the procedures. This absence of stakeholder participation currently grants GAMEP great scope for exercising a significant degree of discretion towards applicants for development, assisted by contributions from the private environmental consultancy offices or similar groups. In this situation, inviting more actors into the EIA circle is likely to improve the accuracy, integrity and quality of such EIA decisions. It would also address several challenges, including the shortage of technical and human resources, as well as institutional capacity, which inevitably hinders the ability of

GAMEP to secure accurate and up-to-date environmental information. Moreover, the scarcity of environmental lawyers in the environmental domain of the KSA was also mentioned by the majority of interviewees in all four categories.

To a varying degree, among other challenges, the need for well-trained and qualified environmental human resources can be seen as a recurrent theme in literature concerning the developing countries in general.¹⁰⁵ This improvement would equip the parties involved, notably the environmental agency's personnel, to harness the legislative and drafting advantages of the relevant legal provisions. Note that this issue is straightforward, 'neutral' and rather rudimentary compared to the 'subjective' challenge laid down in the wider literature such as 'whose science?' is the science involved in legal environmental decisions.¹⁰⁶ It is also quite basic to the argument in the literature about how science is injected into legal means across disparate legal cultures and the way science is 'contained' by the law.¹⁰⁷ In a more direct fashion, and in terms of the theme of risk, several interviewees' responses revealed the perception that science represents 'objective' numbers and fair indicators, and thus when decisions or regulation 'appeals to science, there is no need for debate'.¹⁰⁸ In fact, few respondents, especially in the (I-C) category resisted this view that 'once science comes in, uncertainty has no room'. This can be exemplified by (I-C-2), who contended that 'it could happen that in some experimental rigorous studies, we affirm the danger or increasing risk from certain industrial practices. The surprise is that a few other labs might come up with starkly different outcomes; that is quite difficult for us to swallow'. Basically, the latter perspective appears more aware of the internal methodological variation within science, and to the fact that science is not one unity that automatically leads to the right unimpeachable ends. In relation to environmental principles, the latter stance leaves more room for the precautionary principle to flourish, regardless of its various potential interpretations.¹⁰⁹ It allows more questions about the reliability, sufficiency and uncertainty of science within regulations and legal and administrative practices.

It seems that the extent to which different permitting agencies value and appreciate the importance of the EIA as a mandatory legal requirement varies. This has brought about a somewhat fragmented and sectoral approach. In addition, carrying out EIAs for public benefit ventures has proved more challenging than doing so for private owned projects, due, inter alia, to the perceived necessity of such public projects.

Overall, it has been found that, despite the existence of a large body of literature on the subject of EIA, its relevance and applicability to a Middle Eastern context, represented here by the KSA's jurisdiction, is questionable and quite limited in many cases. Thus, this article would encourage more studies especially in terms of

105 Alshuwaikhat (n 33). Kanokporn Swangjang, 'Comparative Review of EIA in the Association of Southeast Asian Nations' (2018) 72 *Environmental Impact Assessment Review* 33. Al-Gilani (n 88) and Al-Gilani and Filor (n 88).

106 Wendy Wagner, Elizabeth Fisher and Pasky Pascual, 'Whose Science? A New Era in Regulatory "Science Wars"' (2018) 362 *Science* 636.

107 Elizabeth Fisher, 'Sciences, Environmental Laws, and Legal Cultures: Fostering Collective Epistemic Responsibility' in Emma Lees and Jorge E Viñuales (eds), *Oxford Handbook of Comparative Environmental Law* (OUP 2019).

108 Bruno Latour, *An Inquiry into Modes of Existence* (Harvard UP 2013), 3.

109 Eloise Scotford, *Environmental Principles and the Evolution of Environmental Law* (Hart 2017).

integrating Middle Eastern situations into the international perspective, to obtain a less Western-oriented, more global perspective. Nevertheless, it should be recalled that the introduction of the EIA regime as an integral part of the KSA's environmental law landscape is a great step forward in the right direction. It is expected that a considerable number of the challenges identified would be addressed by the national Vision 2030 masterplan, which is intended to instigate many reforms and developments in terms of environmental protection.¹¹⁰

110 Indeed, one of the major objectives of this relatively newly introduced national master plan is achieving environmental sustainability. See the Vision 2030 document (n 8) especially 23–24.