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RESEARCH ARTICLE

Section: *Law and Legal Studies***A legal perspective to environmental sustainability in Saudi Arabia****Bader Nasser Aldosari**

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ABSTRACT

This study presents a legal perspective on environmental sustainability in Saudi Arabia. The principal purpose of the study is to explore how the different aspects of environmental sustainability are highlighted and fostered by various laws laid down by the Saudi government and emphasized by the 2030 Saudi Vision, and to examine Saudi Arabia's environmental laws and regulations, emphasizing the Kingdom's attempts to strike a balance between environmental responsibility and economic progress. The study attempts to fulfill three main objectives: (1) exploring how environmental sustainability is supported by various laws and regulations in Saudi Arabia, (2) demonstrating the different laws and rules regulating the process of environmental sustainability in Saudi Arabia, and (3) highlighting how 2030 Saudi Vision is highly concerned with the numerous facets of environmental sustainability. Two main findings are revealed here: first, Saudi Arabia has made significant strides in creating a strong legal framework to handle environmental concerns while striking a balance between sustainability and economic growth; and second, Saudi Arabia is making great efforts to safeguard its environment for coming generations by enacting extensive environmental laws, rules, and regulations, such as those pertaining to waste management, pollution prevention, and water conservation.

KEYWORDS: law, environment, Saudi Arabia, sustainability, Vision 2030

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1. Introduction

Countries all over the world are creating and enforcing stricter environmental rules, laws, and regulations as sustainability and environmental preservation get more attention (Crowther et al., 2018; Purvis et al., 2019; Viñuales, 2021). This is also true of Saudi Arabia, a major Middle Eastern powerhouse whose economy is mostly based on the production of gas and oil. In the face of mounting global difficulties, Saudi Arabia has emerged as a leader in environmental conservation by enacting ambitious laws and programs. Vision 2030 is a pioneering strategy for sustainable development that prioritizes enhancing quality of life and conserving natural resources. The Kingdom has started a number of legislative initiatives to address environmental challenges and has accredited the necessity for sustainable environmental management despite its reliance on fossil resources. Protecting natural resources, reducing pollution, and advancing sustainable development are the goals of these laws and regulations (Aladeem & Al-Sogair, 2019). Driven by the determined national Vision 2030, the Kingdom of Saudi Arabia is undergoing a thorough review of its laws and policy-making as it embarks on a new era of rebuilding its whole administrative bureaucratic apparatus. According to Viñuales (2021), the environmental protection domain is one of the main legislative areas being carefully examined and reviewed under this approach. At the highest level of policymaking, this appears to be a clear acknowledgement that a new approach to environmental governance must be developed. For instance, the pillar “Vibrant Society, With Fulfilling Lives” emphasizes this commitment in strong words:

Achieving Environmental Sustainability: By preserving our environment and natural resources, we fulfill our Islamic, human and moral duties. It is our responsibility to future generations and essential to the quality of our daily lives. To safeguard our environment, we are improving the efficiency of waste management, establishing comprehensive recycling projects, reducing all types of pollution and fighting desertification. Use of water resources will also be optimized through reduced consumption and utilizing treated and renewable water. In addition, efforts are underway to protect and rehabilitate our beautiful beaches, nature reserves and islands, and make them open to everyone

The above extract mirrors a strong commitment to achieving environmental sustainability and addressing its various facets in Saudi Arabia, including its legal perspective. The current study, therefore, attempts to shed light on the different laws and regulations that govern, shape, and manage the whole process of sustainable environment in Saudi Arabia.

Environmental sustainability has been a major global concern in recent decades, leading countries to reassess their legal and developmental policies (Schrijver, 2008; Birnie et al., 2009; Williams, 2023). This dilemma is especially important for Saudi Arabia, an oil-rich country that has historically depended on fossil fuels. Environmental protection has emerged as a top issue as the Kingdom moves forward with its revolutionary Vision 2030, which seeks to diversify the economy and advance sustainable development. In addition to economic and technical change, this strategic shift calls for a strong and flexible legal system that can handle difficult environmental issues. In Saudi Arabia, environmental sustainability is now seen as an essential part of national strategy rather than just a side issue. Legal tools are being used to enforce environmental norms, promote corporate accountability, and encourage sustainable resource use in a variety of areas, from waste management and water conservation to biodiversity protection and climate change mitigation (Alqahtani et al., 2022). However, how well these laws are drafted, implemented, and complied with in relation to international environmental commitments will determine how effective they are.

By examining important laws, regulatory bodies, and policy initiatives influencing Saudi Arabia's environmental governance, this paper investigates the legal underpinnings of environmental sustainability in that nation. It looks at the ways that national laws and international environmental agreements interact, assesses the function of judicial and regulatory enforcement, and takes into account the successes as well as the continued difficulties in creating a legally sustainable environmental future. This study seeks to shed light on the fundamental role that the law plays in guiding Saudi Arabia in the direction of sustainability and environmental consciousness by providing a legal viewpoint.

The significance of the current study lies in its attempt to offer a general survey of the role of laws and regulations laid down by Saudi Arabia in terms of sustainable environment. The study, therefore, is

significant because it sheds light on the relationship between laws and environmental sustainability. The study will contribute to the field of law studies as well as to sustainable environment studies. The study, thus, is an interdisciplinary one that connects legislation with sustainability topics in Saudi Arabia. Saudi Vision 2030 places a strong emphasis on improving laws and regulations pertaining to sustainability and a comprehensive development strategy promoting laws and regulations (Aladeem & Al-Sogair, 2019). Saudi Vision 2030 also seeks to improve legislation indicators worldwide and encourage people to determine their employment.

1.1. Research Objectives

1. To explore the extent to which environmental sustainability is supported by various laws and regulations in Saudi Arabia.
2. To demonstrate the different laws and rules that regulate the process of environmental sustainability in Saudi Arabia.
3. To highlight how the 2030 Saudi Vision is highly concerned with the numerous facets of environmental sustainability.
4. To shed light on the different manifestations of environmental sustainability that are addressed, supported, and fostered by laws and regulations in Saudi Arabia.

1.2. Research Questions

The following questions are raised in this study:

- RQ1. How is environmental sustainability supported by various laws and regulations in Saudi Arabia?
- RQ2. What are the different laws and rules regulating the process of environmental sustainability in Saudi Arabia?
- RQ3. How does the 2030 Saudi Vision emphasize the numerous facets of environmental sustainability?
- RQ4. What are the different manifestations of environmental sustainability that are addressed, supported, and fostered by laws and regulations in Saudi Arabia?

The remainder of this paper is structured as follows: Section 2 presents the literature review of the current study by providing a detailed discussion on the concepts of sustainability, and its environmental perspective, a background on Saudi Arabia's environmental protection, and Saudi Arabia's principal environmental laws and regulations. Section 3 offers the methodology and the analytical procedures adopted in this study. Section 4 demonstrates the findings of the study and a detailed discussion of the obtained findings. Section 5 is the conclusion of the study, in which the main outcomes of the study are provided as well as some recommendations for future research.

2. Literature Review

2.1. Sustainability

The UN World Commission on Environment and Development provides the definition that is most frequently cited: sustainable development is development that satisfies current demands without endangering the capacity of future generations to satisfy their own (Halla & Binder, 2020; Williams, 2023). In order to build thriving, healthy, miscellaneous, and irrepressible communities for this generation and future generations, sustainability is the convergence of social justice, environmental health, and economic vitality (Kim et al., 2022). Sustainability recognizes the connection of these issues and strives to offer solutions for all these problems with all their dimensions and perspectives. Sustainable practices encourage the health and vivacity of the environment, people, and economy (Kaswan et al., 2019). According to Xuan (2024), sustainability is predicated on the idea that resources are limited and ought to be used prudently and cautiously, taking into account long-term goals and the effects of resource usage. In its most basic form, sustainability is about the world we leave for our kids and grandkids (Halla & Binder, 2020; Zhang et al., 2024). One of the most significant ideas of the twenty-first century is sustainability. According to Sun et al. (2022), sustainability provides a strategy to achieve long-term well-being for both people and the earth as environmental, economic, and social issues become more pressing worldwide. In its most basic definition, sustainability refers to addressing current needs without sacrificing the capacity of future generations to address their own. It entails making ethical choices and doing activities that

safeguard the environment, encourage economic growth, and advance social justice.

The ecological, economic, and social facets of sustainability are the three levels of inclusive content that make up the term 'sustainability' (Schrijver, 2008; Sun et al., 2022). Thus, the first layer is the center of the investigation. Although it was first established in 1987, sustainability is actually a broad, mainly non-legal concept that encompasses more than just the fundamental notion of protecting environmental benefits for future generations. It includes economic, social, and environmental pillars because, in its broadest definition, it is reaffirmed as a factor influencing all systems of society in all areas of decision-making, legislation, and law enforcement. According to Birnie et al. (2009), 'sustainable development' involves reorienting the global economic system in order to meet more than only environmental needs. However, in a more limited sense, only the environmental aspect is regarded as a main element, which suggests that environmental protection is given careful thought while making economic decisions. A broad, nebulous idea that is challenging to define legally, the concept of sustainable development has many facets and levels of interpretation in the environmental domains (e.g., biodiversity, climate challenges, and water). According to Boyle and Freestone (1999), the idea of environmental sustainability is generally not (exclusively) applied within the framework of states and international law. It specifically calls for international cooperation in order to be implemented in a meaningful way, taking into account the varying ecological challenges that states and regions face as well as their varying levels of vulnerability.

It is impossible to exaggerate the significance of sustainability. There is an urgent need to alter the way we live, create, and consume because of the world's population growth and the depletion of natural resources. For Cruz and Tan (2022), the loss of biodiversity, deforestation, air and water pollution, and climate change are all obvious indicators that the planet is under stress. Sustainability is important because it preserves the ecosystem for future generations, enhances health and well-being by lowering pollutants and raising living standards, guarantees long-term economic stability by encouraging innovation and cutting waste, and lessens inequality by attending to the needs of the weak and impoverished (Jeong et al., 2022). Sustainability is being promoted globally by governments, organizations, and individuals. The United Nations Sustainable Development Goals (SDGs), a collection of 17 global objectives agreed upon in 2015 to eradicate poverty, safeguard the environment, and guarantee peace and prosperity by 2030, are one significant endeavor. These objectives cover a wide range of topics, such as responsible production and consumption, clean energy, sustainable cities, and climate action. Through national programs like Vision 2030, which set lofty targets for sustainable economic growth, environmental preservation, and renewable energy, nations like Saudi Arabia are also making important strides.

2.2. Environmental Sustainability

The realization of the significant effects that human activity has on the health of the planet and the welfare of its future generations has made environmental sustainability a top priority in recent decades. Throughout history, people have frequently overused natural resources without considering their limited supply, which has led to deforestation, fishery depletion, and the depletion of fossil fuels (Fadeeva, 2005; Kaswan et al., 2019; Zou et al., 2025). Furthermore, despite its parallel economic expansion, industrialization has resulted in extensive contamination of the air, water, and soil due to companies releasing poisons that harm the environment and provide health risks. Still, for Islam and Ali (2024), human-caused actions like pollution, habitat loss, and overexploitation have disrupted ecosystems, reduced biodiversity, and caused the extinction of several species. Once a neglected phenomenon, climate change is now recognized as a serious worldwide emergency. It is typified by rising temperatures, unusual weather patterns, and melting ice caps, necessitating immediate action to diminish conservatory gas productions and shift to new energy bases (Fisher et al., 2021; Xuan, 2024).

Birnie et al. (2009) list the following as components of environmental sustainability: i) the integration of economic development and environmental protection; ii) the right to development; iii) the sustainable use and conservation of natural resources; iv) intergenerational equity (relations between current and future generations); v) intragenerational equity (relations between, for example, the developed and developing world, or the elderly and youth); and vi) the procedural elements of sustainable development. Further, Zhang et al. (2024) argue that the adoption of multiple sets of internally consistent ecocentric limits, the development of fairly shared rights, responsibilities, and risks, the provision of adequate legal protection and the development

of adaptive capacity for the most vulnerable to deal with climate change, the greening of current international instruments on trade, investment, and development assistance, and the goal of involving pertinent stakeholders in the definition and implementation of the aforementioned instruments are the five essential principles that Gupta and Vegelin (2016) persuasively identified as being necessary to achieve environmental sustainability.

Kim et al. (2022) argue that one of the most important issues facing the modern world is environmental sustainability. They maintain that natural ecosystems are under tremendous and frequently unsustainable strain as a result of the world's population growth and increased industrial activity. In order to prevent the depletion or degradation of natural resources and maintain long-term environmental quality, environmental sustainability refers to the responsible engagement with the environment. Simply put, it means ensuring that future generations have access to the resources they require to exist and prosper while also living in a way that does not negatively impact the environment. It is impossible to exaggerate the significance of environmental sustainability. Essential services, including fresh water, clean air, fertile soil, climate regulation, and biodiversity, are all provided by the Earth's ecosystems. Life as we know it would not exist without these natural systems.

There are various reasons why environmental sustainability is important. First, conservation of natural resources: freshwater, forests, and fossil fuels are only a few of the world's limited resources (Cruz & Tan, 2022). The future supply of these resources is threatened by excessive use and unwise use. Sustainability guarantees that we make prudent and effective use of these resources. Second, fighting climate change: deforestation and the combustion of fossil fuels are examples of unsustainable behaviors that increase greenhouse gas emissions, which fuel climate change. Reducing carbon footprints, switching to renewable energy sources, and preserving carbon sinks like forests and oceans are all part of environmental sustainability (Adiansyah, 2022; Alomari & Heffron, 2021). Third, preserving biodiversity: ecosystems, food chains, and human health may all suffer significantly from the extinction of plant and animal species. By preserving species and habitats, sustainable practices help to keep nature in a state of balanced health. Fourth, encouragement of human health and welfare: an atmosphere that is clean and healthy lowers the risk of illness and promotes both physical and mental wellness. According to Cruz and Tan (2022), poor sanitation, toxic waste, and air and water pollution all directly harm people's health. Consequently, future generations' existence and the health of our world depend on environmental sustainability. Humanity can prevent irreparable harm and build a more resilient and balanced world by preserving the environment, making prudent use of resources, and committing to sustainable development. Tomorrow's world will be shaped by the decisions we make today. As a result, it is important to encourage and implement environmental sustainability in all that we do.

2.3. Saudi Arabia's Environmental Protection: A Historical Background

Saudi Arabia has never taken a strong stance on environmental preservation. Environmental issues were not given much attention in the early years since the nation's main priorities were economic growth and oil exploration (Fadeeva, 2005). However, the detrimental effects on the quality of the air, water, and land became apparent when the country started to see tremendous industrial growth and urbanization. Saudi Arabia was asked to reevaluate its approach to environmental governance due to the increasing concern of the world community about environmental issues, especially following the Rio de Janeiro Earth Summit in 1992. With the creation of numerous institutions and the enactment of environmental legislation intended to address the Kingdom's environmental issues, the early 2000s represented a watershed for Saudi Arabia. The government started taking action to guarantee sustainable growth in the future and the preservation of natural resources for coming generations (Halder et al., 2020).

Introduced in 2021, the Saudi Green Initiative (SGI) is one of the Kingdom's most important environmental initiatives. The SGI seeks to: (1) plant ten billion trees in Saudi Arabia, (2) restore 40 million hectares of degraded land, (3) raise the proportion of protected areas in the Kingdom to 30% of the total land area, and (4) by 2030, cut carbon emissions by almost 270 million tons per year. This program demonstrates Saudi Arabia's dedication to combating desertification, enhancing air quality, and promoting ecosystem health in general. By supporting regional and international environmental goals, it also promotes global climate action.

2.4. Saudi Arabia's Principal Environmental Laws and Regulations

In order to promote sustainable development and guarantee a bright future for future generations, the Kingdom has made strides in its environmental regulatory framework. The Kingdom has put laws and policies pertaining to environmental preservation, improvement, and the growth of renewable energy projects into effect in order to support environmental sustainability, all in line with Vision 2030.

2.4.1. The Saudi Environmental Protection Law (SEPL)

The Environmental Preservation Law, which was passed in 2001, is one of the most important pieces of legislation pertaining to environmental preservation in Saudi Arabia. This law lays out important guidelines for resource conservation, waste management, and pollution control and forms the cornerstone of the Kingdom's environmental policy (Nasir et al., 2022). All commercial organizations and industries are required by law to use sustainable practices and adhere to environmental requirements. In order to enforce these rules, it also creates the Saudi Presidency of Meteorology and Environmental Protection (PME), which is currently a division of the Saudi Ministry of Environment, Water, and Agriculture. Businesses are required by law to obtain environmental authorities' clearance before beginning any initiatives that could significantly affect the environment. Penalties for infractions are also outlined in the statute, and they include fines and possible company activity suspension. This law seeks to guarantee that industrial operations are carried out with the least amount of negative impact on the environment (Ahmad et al., 2022).

A constitutional requirement is established in Article 32 of the Basic Law of Governance: "The State shall seek to conserve, protect, and develop the environment and prevent pollution." At first, the PME was in charge of environmental permits and regulations. In 2019, the Ministry of Environment, Water, and Agriculture (MEWA) reassigned its responsibilities to a number of specialized centers, including: the National Center for Environmental Compliance (NCEC), (2) the National Center for Vegetation Cover Development and Combating Desertification (NCVC), the National Center for Wildlife (NCW), National Center for Waste Management (MWAN), and the National Center for Meteorology (NCM). Furthermore, air, water, land, animals, vegetation, marine and coastal ecosystems, and protected areas are all covered in the 49 articles of the 2020 Environmental Law, which were consolidated from previous legislation. According to Alqahtani et al. (2022), the Saudi Environmental Protection Law (SEPL) also focuses on maritime habitats, biodiversity, vegetation and soil cover, pollution, ecosystem and natural resource conservation, and emergency responses to environmental calamities. The law further incorporates environmental priorities into development and supports the Kingdom's Vision 2030 aims. Its tenets are put into practice through programs like SGI and MGI, which include emissions reduction, land restoration, and tree planting. Consequently, an aspirational and developing dedication to sustainable development is reflected in Saudi Arabia's Environmental Protection Law. The Kingdom seeks to preserve its natural legacy while advancing economically by fusing strict legal enforcement, institutional reform, and ambitious environmental initiatives.

2.4.2. The Environmental Impact Assessment (EIA) Law

Saudi Arabia has created particular rules that command that all important growth schemes experience an Environmental Impact Assessment (EIA). This law requires businesses and developers to perform an Environmental Impact Assessment (EIA) before building new facilities or major infrastructure projects (Edo et al., 2024). The evaluation must pinpoint possible environmental hazards related to the project and provide countermeasures for any negative consequences. The government's efforts to prevent irreparable environmental harm from industrial and infrastructure developments are aided by the EIA law. In order to lessen their influence on the environment, it encourages developers to embrace green technology and practices. Large-scale projects like petrochemical facilities, oil refineries, and significant urban developments are now more sustainable thanks to the law's implementation (Edo et al., 2024; Halder et al., 2020).

Since the early 2000s, Saudi Arabia's Environmental Impact Assessment (EIA) framework has undergone substantial change, becoming a vital component of the nation's strategy for sustainable development. By assessing and reducing the environmental effects of development initiatives, EIAs make sure that economic advancement doesn't come at an excessive ecological cost. The EIA process in Saudi Arabia was started by the General Environmental Regulation (2001), but it was expanded and modernized by the more recent Environmental

Law under Royal Decree M/165 (2020/2021), which connected it to disaster management, pollution control, wildlife protection, and resource conservation. Through a network of specialist national centers that address compliance, waste, wildlife, vegetation, and meteorology, MEWA is now in charge of environmental governance. Permit issuing, including the need for thorough EIAs, is expedited by these centers. At the same time, Royal Commission jurisdictions function according to different regulations, while they follow the same EIA guidelines with additional sector-specific restrictions. Crucially, the EIA framework supports green development, urban greening initiatives, and national goals in line with Vision 2030. It is integrated into Saudi Arabia's larger sustainability agenda. Although the system is getting stronger because of reforms and digital tools, enforcement and capability remain major obstacles. To optimize EIA performance in the Kingdom, further advancements are necessary, particularly in the areas of stakeholder participation, regulatory clarity, and openness.

2.4.3. The Saudi Water Law (SWL)

One of Saudi Arabia's most urgent environmental problems is water scarcity. Being among the driest in the world, the nation mostly depends on subterranean water supplies and desalination. To solve this difficulty, Saudi Arabia developed the Saudi Water Law, which controls the use, conservation, and management of the Kingdom's water resources. The Water Law of 2020, which was formally adopted through a royal decree, has 17 chapters and 77 articles. It went into effect 90 days after it was published in the official gazette in the middle of 2020. It replaced previous laws, including the 2000 decree on treated sewage reuse and the 1980 Royal Decree (No. M/34). In both urban and rural areas, the law seeks to control water use, stimulate the use of treated wastewater, and promote water conservation (Ashford & Hall, 2011). The Water Law makes sure that water extraction doesn't go beyond sustainable limits and places a strong emphasis on protecting groundwater. In order to meet population demands while preserving water resources, the law also encourages the construction of water infrastructure, such as irrigation systems, wastewater treatment plants, and desalination plants.

This law is a component of Saudi Arabia's larger initiatives to effectively protect and manage water resources in the face of increased demand, especially from the urban, agricultural, and industrial sectors, and growing scarcity. The Water Law's objectives are as follows: conserve and develop all water resources in a sustainable manner, supply inexpensive, safe, and hygienic water, particularly for farming, encourage participation from the private sector, and ensure equitable access to water under controlled governance structures. With the exception of seawater, which is still outside its purview, it covers all surface water and groundwater in the Kingdom, both renewable and non-renewable. Concerning current events and law enforcement, 2024 saw the introduction of groundwater use laws that tightened well owner licensing and enforcement. Also, enforcement measures, such as penalties for illicit connections, demonstrate improved governance under the law. Although the Water Law establishes a solid framework for sustainable management, its effectiveness depends on institutional capacity, enforcement, and the shift away from extensive subsidies and toward more resilient water-use practices.

2.4.4. The Waste Management Law (WML)

As part of its attempts to protect the environment, Saudi Arabia has concentrated on waste management in addition to air and water quality. Solid and hazardous waste collection, treatment, disposal, and recycling are governed by the Waste Management Law. It incentivizes private sector investment in garbage recycling initiatives and the creation of eco-friendly waste treatment technology. With an emphasis on recycling and material reuse, the government has also implemented initiatives to lessen the quantity of garbage dumped in landfills. This law is a component of a larger initiative to transition to a circular economy, which minimizes waste and reuses resources (Aguilera et al., 2021; Gupta & Vegelin, 2016).

By issuing the Waste Management Law by Royal Decree No. M/3, also known as the Waste Management System, Saudi Arabia implemented a historic change to its environmental regulations in 2021. This law created a contemporary, integrated legislative framework governing waste treatment throughout the Kingdom and went into force a few months after it was published in the Official Gazette. For Alqahtani et al. (2022), the core concern of this law is to promote resource recovery, recycling, and safe disposal while highlighting the transition to the circular economy's tenets. Its main objectives include granting permits for all waste-related operations, creating thorough planning for strategy and backup, and coordinating with other pertinent agencies to match the national policy with operational waste management strategies. Also, in light of this law and by approving

operational disposal procedures, waste services can be made financially sustainable (Almoosa et al., 2015).

3. Methodology

3.1. Approach and Design of the Study

This study is based on a descriptive, qualitative analytical approach to explore how the different aspects of environmental sustainability are highlighted and fostered by various laws laid down by the Saudi government and emphasized by the 2030 Saudi Vision, and to examine Saudi Arabia's environmental laws and regulations, emphasizing the Kingdom's attempts to strike a balance between environmental responsibility and economic progress. The study thus is qualitative and descriptive in nature, as it will review and discuss the extent to which laws and regulations in Saudi Arabia extensively support and boost environmental sustainability in all its aspects.

3.2. Research Procedures

The current study adopts particular analytical procedures that constitute three stages. First, the study will review the general literature of the studies that deal with laws and sustainability in general and then move to shed light on the laws and regulations that are put in place to support and reinforce environmental sustainability with all its aspects. Second, the study will classify the various aspects and manifestations of the laws that address sustainable environment. Third, the study will mirror the relationship between the various laws and sustainable environment and the way these laws and regulations support and foster a comprehensive accomplishment to environmental sustainability.

4. Findings and Discussion

The above theoretical background demonstrates a number of findings in terms of the Saudi laws regulated and laid down to preserve and maintain environmental sustainability in the Kingdom of Saudi Arabia. These findings are as follows:

4.1. Laws and Regulations: Defining Rights and Obligations in Environmental Preservation

In Saudi Arabia, rules and regulations play a crucial role in outlining the rights and responsibilities related to environmental protection. They foster responsibility, safeguard natural resources, and lay the groundwork for sustainable development. Strong environmental regulations and efficient enforcement will be essential to ensuring that the Kingdom's ambitious Vision 2030 goals are met without endangering the environment's health for coming generations. This reconciles with Aladeem and Al-Sogair's (2019) argument, who emphasize that laws and regulations are essential when it comes to defining the rights and obligations associated with environmental preservation and compensating those impacted by environmental pollution. Laws offer a structure for establishing norms and regulations for actions related to environmental preservation. They set forth the legal duties that people, businesses, and governmental organizations have to protect the environment and lessen its impacts. Laws also frequently specify procedures for making polluters answerable for their deeds and guaranteeing that harmed individuals are compensated for their losses. In addition to discouraging environmental infractions, this aids in environmental restoration and provides assistance to individuals negatively impacted by pollution occurrences. Saudi Arabia's Vision 2030, a government strategy to diversify the economy and encourage sustainable growth, influences the country's approach to environmental preservation. As a result of this vision, numerous pieces of environmental protection legislation and regulations have been introduced and changed. To ensure that the public and commercial sectors follow environmental standards, organizations like the Ministry of Environment, Water, and Agriculture and the National Center for Environmental Compliance (NCEC) have been authorized to execute and enforce these policies.

The precise articulation of responsibilities for both individuals and industries is a key component of Saudi environmental legislation. For instance, laws governing water use, waste disposal, and industrial emissions are in place to reduce the negative effects of economic activity on the environment. In order to prevent development from resulting in long-term environmental harm, projects must now pass Environmental Impact Assessments (EIAs) before being approved. Enterprises that disregard environmental regulations risk sanctions, such as fines and potential shutdown. These regulations encourage businesses to use more sustainable practices and greener

technologies. The rights of communities and citizens to live in a clean and safe environment are also outlined in Saudi Arabian legislation. Regulations that safeguard forests, wildlife, marine habitats, and natural reserves reflect this. The public is entitled to information about environmental hazards and, more and more, to take part in environmental policy debates. To make sure that people are aware of their part in protecting the environment, awareness campaigns and neighborhood-based environmental projects are also encouraged. Significant efforts have also been made by Saudi Arabia to preserve its natural resources, especially water, which is a valuable but limited resource in the Kingdom. Legislation has been proposed to control the extraction of groundwater, stimulate the use of treated wastewater, and promote water conservation in homes and farms.

Furthermore, new rules encourage renewable energy projects, especially wind and solar, which lessen the Kingdom's reliance on fossil fuels and contribute to a reduction in greenhouse gas emissions. Additionally, environmental policies and royal decrees assist biodiversity conservation and protected regions. Hunting endangered animals is forbidden, and wildlife reserves, including those run by the Saudi Wildlife Authority, are legally protected. The preservation of Saudi Arabia's distinctive ecosystems, such as deserts, coral reefs, and mountain environments, depends on these legislative actions. But with any legal system, enforcement is still difficult. Although the regulatory structure is getting better, more public involvement, more robust monitoring systems, and continuous investment are needed for actual implementation. To guarantee that environmental regulations are not only drafted but are actively enforced, transparency, education, and collaboration among governmental entities, corporations, and citizens are essential.

4.2. Saudi Arabia's strong commitment to environmental preservation and sustainable development is shown in its environmental protection strategy

The Kingdom is implementing comprehensive measures to preserve its natural environment while pursuing economic advancement, ranging from extensive reforestation and investments in clean energy to legal reforms and citizen involvement. Saudi Arabia's strategic strategy serves as a model for other countries looking to strike a balance between environmental stewardship and development as the world's environmental problems continues to worsen. This finding demonstrates the significance and gravity of the Kingdom of Saudi Arabia's initiatives in the areas of sustainable development and environmental preservation. Stated differently, the Kingdom's approach demonstrates its unwavering and strong commitment to striking a balance between environmental preservation and social and economic development. This demonstrates a holistic approach to development that guarantees the environment and natural resources will remain sustainable for present and future generations. This outcome shows how dedicated the Kingdom is to preserving biodiversity, enhancing environmental quality, and encouraging community involvement in environmental preservation for the good of all.

Long renowned for its enormous oil reserves and arid terrain, Saudi Arabia is currently going through a significant shift in how it views sustainable growth and environmental protection. The Kingdom has created a thorough environmental protection plan in recognition of the pressing need to address environmental issues such as pollution, water scarcity, climate change, and biodiversity loss. In keeping with international environmental standards and the objectives of Saudi Vision 2030, this policy demonstrates a strong national commitment to creating a greener, more sustainable future. At the heart of this strategy is Vision 2030, a wide-reaching national development plan aimed at diversifying the Saudi economy, reducing dependence on oil, and promoting social and environmental sustainability. One of its main tenets is environmental preservation. The Kingdom has pledged to embrace clean energy technology, increase green space, and safeguard natural resources under Vision 2030. The objective is to attain economic expansion without sacrificing the environment.

The Saudi Green Initiative (SGI) is among the most important programs exhibiting this dedication. SGI was established in 2021 with a number of challenging environmental objectives to fight climate change and enhance quality of life. These include reclaiming 40 million hectares of degraded land, planting 10 billion trees around the Kingdom, and raising the proportion of renewable energy in the country's energy mix to 50% by 2030. In addition to lowering carbon emissions, these initiatives aim to improve biodiversity and build a more sustainable environment for coming generations. Saudi Arabia's emphasis on renewable energy and lowering carbon emissions is another essential element of its environmental protection policy (Alomari & Heffron, 2021). The Sakaka solar power plant and NEOM city are two examples of the solar and wind energy projects in which the Kingdom is making significant investments. These initiatives are a part of a larger strategy to move toward

a low-carbon economy and meet the obligations outlined in the climate change accord that Saudi Arabia joined, the Paris Agreement. The nation is aggressively attempting to lessen the effects of climate change by cutting greenhouse gas emissions and improving energy efficiency.

Another important component of Saudi Arabia's environmental plan is water conservation and sustainable resource management. The Kingdom has created policies and technologies to better manage water because it is one of the world's most water-scarce nations. According to Almoosa et al. (2015), this includes funding renewable energy-powered desalination facilities, water recycling initiatives, and regulations meant to lower water usage in cities and agriculture. These actions contribute to long-term water security and the preservation of valuable water resources. Saudi Arabia has put in place a strong legal and institutional framework to help achieve these objectives. To enforce and oversee environmental regulations, organizations including the National Center for Vegetation Cover, the Ministry of Environment, Water, and Agriculture, and the National Center for Environmental Compliance (NCEC) collaborate. These organizations uphold laws pertaining to waste management, wildlife preservation, pollution prevention, and land restoration. The government uses these tools to make sure businesses and people follow environmental regulations. Furthermore, there is a strong push for environmental awareness and citizen participation. Through campaigns, cleanup drives, tree planting, and environmental education programs, the government encourages private businesses, schools, and communities to get involved in environmental activities. The Kingdom cultivates a sense of collective responsibility for environmental protection by increasing public knowledge and engaging the public.

4.3. The Purpose of Environmental Pollution Liability Laws in Saudi Arabia: Promoting Responsible Resource Use and Reducing Pollution

The main purpose of the environmental pollution liability laws is to promote the responsible use of natural resources and to lower environmental pollution. This finding correlates with Islam and Ali (2024), who emphasize the goal of environmental pollution liability legislation, which is to reduce environmental contamination and encourage the prudent use of natural resources. These regulations promote the adoption of eco-friendly procedures and technologies by people, businesses, and organizations. These rules encourage organizations to invest in cleaner manufacturing techniques and lessen their environmental impact by enforcing accountability for pollution. These regulations also aid in preventing and lessening environmental harm. These rules provide financial incentives for organizations to steer clear of environmentally hazardous activities and instead invest in sustainable methods by making polluters responsible for their conduct. Furthermore, emphasis is placed on the function of enforcement mechanisms in guaranteeing the efficacy of environmental contamination responsibility legislation. Deterring non-compliance and making sure that polluters are held responsible for any environmental harm require effective enforcement. All things considered, this outcome emphasizes how crucial environmental pollution liability laws are to advancing sustainable development and safeguarding the environment for both the current and coming generations.

In Saudi Arabia, state initiatives like Vision 2030 and the Saudi Green Initiative have made environmental protection a top concern. The application of environmental contamination responsibility laws is one of the most crucial instruments in this endeavor. In addition to promoting the prudent use of natural resources, these laws also lessen environmental degradation by making offenders answerable for the harm they inflict. The idea of environmental liability is founded on the straightforward tenet that those who pollute the environment or harm it must accept accountability for their actions. This legal strategy has been included in a number of environmental laws in Saudi Arabia that are supervised by organizations such as the Ministry of Environment, Water, and Agriculture and the National Center for Environmental Compliance (NCEC). These rules make it very evident that people, businesses, and other organizations are held legally responsible for any pollution or environmental damage brought on by their operations.

Promoting the wise use of natural resources like soil, water, air, and biodiversity is one of these regulations' primary objectives. The Kingdom promotes more sustainable practices by imposing regulatory requirements on developers and industries to reduce waste and use resources effectively. Industries, for instance, are subject to stringent laws governing waste management, emissions, and the handling of dangerous products. Businesses that are found to be in violation of these guidelines risk fines, having to fix the harm they have caused, or even being shut down. These legal repercussions serve as a disincentive for businesses to embrace more environmentally friendly procedures and technologies.

4.4. Saudi Arabia's Environmental Protection: A Vision for a Sustainable Future

Saudi Arabia has become a vocal supporter of sustainable development and environmental preservation. The Kingdom, one of the world's top producers of oil, has had to contend with the difficult task of striking a balance between environmental stewardship and economic expansion. However, Saudi Arabia is making great efforts to protect its environment for coming generations through audacious reforms, national initiatives, and creative projects. The Kingdom is showing a strong commitment to environmental sustainability by lowering carbon emissions and safeguarding natural resources (Alomari & Heffron, 2021). Vision 2030, Saudi Arabia's ambitious national strategy to diversify its economy and lessen its dependency on oil, is at the center of the country's environmental initiatives. Building a strong economy and a dynamic society that is environmentally sustainable is one of Vision 2030's main objectives. Environmental preservation is now regarded as a crucial component of national advancement rather than something distinct from it. In order to change its environmental regulations and embrace a more sustainable future, Saudi Arabia has set out on an ambitious journey. As cities grow, the population grows, and industrial activity rises, environmental issues are more important than ever. The Kingdom has taken this into consideration and made environmental preservation a central component of its national development goal. Saudi Arabia has launched a number of significant programs to save its natural environment in line with this ambition. These include lowering pollution, supporting renewable energy, protecting biodiversity, and promoting the wise use of land and water resources.

5. Conclusion

This study offered a legal perspective on Saudi Arabia's environmental sustainability by investigating how the 2030 Saudi Vision and other regulations established by the Saudi government highlight and promote the various facets of environmental sustainability. The study showed that Saudi Arabia, in its quest for environmental sustainability, is at a turning point. Although institutional and legal improvements have been sparked by Vision 2030, long-term progress hinges on how effectively and consistently environmental law enforcement operates. A legal framework that not only safeguards the Kingdom's natural environment but also ensures a more sustainable future for future generations can be established by expanding on international obligations, simplifying legal procedures, and encouraging increased accountability and civic engagement. The legal viewpoint provides Saudi society with more than just regulations; it also lays the groundwork for a long-lasting environmental morality. The analysis also demonstrated that attaining environmental responsibility is essential to guaranteeing the protection of the environment and natural resources for present and future generations. We cannot make progress toward attaining sustainable environmental goals unless the legal system is functional and its enforcement is fair and rigorous. Governments, local communities, businesses, and individuals must thus cooperate in order to effectively and sustainably carry out our environmental obligations and to increase public understanding of the significance of environmental protection. Our world and future generations can have a better future if we enact robust environmental policies, improve existing laws, and enforce them strictly. The following findings and suggestions are the outcome of this investigation.

The outcomes of this study can be summarized in the following points: First, the study shows that Saudi Arabia has made significant strides in creating a strong legal framework to handle environmental concerns while striking a balance between sustainability and economic growth. Second, the study demonstrates that the Kingdom is making great efforts to safeguard its environment for coming generations by enacting extensive environmental rules and regulations, such as those pertaining to waste management, pollution prevention, and water conservation. Third, the study clarifies that a greener, more sustainable future may be paved by Saudi Arabia with sustained investment in environmental technology, public awareness initiatives, and stringent regulatory enforcement. Fourth, within the context of legal studies, this study is expected to offer a further comprehensive perception of sustainability topics, particularly to the field of law studies and sustainable environment, which offers further avenues for future research.

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