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Religion and Climate Change: Climate Politics in the Gulf: An In-depth Analysis of the Role of Religion in Saudi Arabia

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Masters of Science in International Relations

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Declaration

I, Rasul Abdibakirovich Abdibakirov, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged, and a reference list has been appended. This work has not been previously submitted to any other university for the award of any type of academic degree.

Signature.....

Date.....

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Any errors are mine alone.

Abstract

An increasing amount of research emphasizes the significance of religion in addressing and tackling climate change. However, there is a gap in research on Muslim communities' engagement with climate change. Even though Muslims are the second-largest faith group, most of the Muslim population is exposed to climate change due to their concentration on those regions that are affected mostly. This master thesis synthesizes existing research on climate change and Muslim communities, mainly focusing on Saudi Arabia. It addresses (a) the greening of religion thesis, emphasizing its relevance and impact in the contemporary world, (b) the historical and contemporary roles of Islamic principles and teachings in shaping climate politics and environmental policies, (c) religious leaders, institutions, and texts influence governmental decision-making processes related to climate change mitigation and adaptation strategies in the Kingdom of Saudi Arabia. The thesis asks how religion influences climate politics and policy formulation in Saudi Arabia. So far, there is a piece of evidence that the Saudi government uses religious leaders to get approval on their political issues, such as the military base of the US on the territory of the Kingdom through a *fatwa.* The Saudi government's priority is economic growth rather than sustainable development. However, there is little chance that political Islam is related to Islamic environmentalism since it is a relatively new and growing field. There is a need for empirical data and research on how Saudi citizens perceive climate change and its relations to Islam.

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1. Introduction

1.1 Problem statement

Climate change and environmental challenges become a significant concern of our time. Nations around the world must deal with a complex range of economic, environmental, and social events and balance between them, which means that states must strive for economic and social development without ignoring the ecological limits of the planet and should not cross the point of no return. The UN's Intergovernmental Panel on Climate Change defined that crossing the 1.5°C threshold risks unleashing more severe climate change impacts, including more frequent and severe droughts, heatwaves, and rainfall. In other words, crossing this threshold will lead to unpredictable consequences. The IPCC warned in its 2018 report that the world had to cut carbon emissions considerably before 2030 to limit the increase of global average temperatures to two degrees Celsius above pre-industrial levels (IPCC, 2018, p. 13). The Middle East, a region of rich energy resources and deep-rooted religious traditions, stands at the intersection of most global challenges. Oil fuel production is the economic and financial resource of the region; however, oil fuel production and consumption are the leading cause of global warming, which has a domino effect on environmental events like desertification, global warming, droughts, sea level rise, etc. Climate change is threatening both Saudi Arabia's oil-based and non-oil-based economic sectors; non-oil economic sectors such as agriculture, fisheries, tourism, and infrastructure are already affected by the physical impacts of climate change, including increases in the Earth's average surface temperature, decreases in annual total precipitation, sea level rise, and, in some cases, extreme events like intense rainfall (Al-Sarihi, 2019). Despite being one of the wealthiest nations globally due to swift economic growth and prosperity from oil, Saudi Arabia is one of the poorest nations in terms of natural renewable water resources (DeNicola et al., 2015). Mismanagement of water use in the agricultural sector and an increasingly Westernized and consumerism-based shift in lifestyle are mostly to blame for Saudi Arabia's water-starved status, as precious groundwater sources have been injudiciously used over many years to the point of depletion (DeNicola et al., 2015).

In recent years, numerous studies have been conducted on religious environmentalism and cultural complexity in order to combat climate change (Chaplin, 2016; Koehrsen, 2021). Islam, despite being the second-largest faith group, shows little engagement with climate change combat compared to Christianity. However, the role of religion, particularly Islam, is vital in the Middle East; therefore, it should play a role and will affect environmental policies and

actions (Abdelzaher et al., 2019). In light of the issue being caused by fossil fuel production, it's worth noting that Islam, as an established religion, originated in a desert region of Arabia. Consequently, the early Muslims, recognizing the limitations of their resources, understood that sustainable progress could only be achieved by adhering to ecological boundaries that apply to all people (Ali, 2016). Islam holds many moral and ethical values that can influence the country's environmental initiatives, policies, and actions, as well as on an individual level, by changing citizens' behavior towards more sustainable consumption patterns.

The economy of the Kingdom of Saudi Arabia, a critical player in the global energy market, is based on fossil fuel production. While climate activists see Saudi Arabia as a main obstructionist in the oil phasing-out deal (Depledge, 2008), Saudi Arabia is trying to shift its economy from fossil fuel dependence into a service-providing industry and diversify it as much as possible (Alomari & Heffron, 2023). Saudi Arabia announced its “Vision 2030” in 2016 with ambitious projects. All these projects and visions seem unsustainable without a predictable climate in the region. The country might be in a “lose-lose” situation, where temperature increase will affect the service-based industry, and at the same time, energy resources will be depleted. Apart from natural disasters, this situation may cause social instability in the region, such as the war for resources, climate refugees, food insecurity, malnutrition, hunger, etc.

This country is under detailed analysis because Saudi Arabia is the most interested in implementing new climate politics since they are one of the most vulnerable to climate change mitigation and adaptation processes, which require cutting fossil fuel production and diversification of the economy. As the leader of the Islamic world, the Custodian of the Two Holy Mosques, the laws and social structure in this country are based on Islamic law, *shari’a*, and an experience of how they tackle climate change might have a practical use for the Muslim population, which mostly lives in the Global South. As a background study, this master's thesis intends to research the overall climate politics of the country and analyze Saudi Arabia under the country's social complexity and what role religion does and can play in the great transformation.

1.3 Research questions and objectives.

The objectives of the thesis are to (a) explore the greening of religion thesis, emphasizing its relevance and impact in the contemporary world, (b) investigate the historical and

contemporary roles of Islamic principles and teachings in shaping climate politics and environmental policies, (c) examine the extent to which religious leaders, institutions, and texts influence governmental decision-making processes related to climate change mitigation and adaptation strategies in Saudi Arabia. All these previous objectives will help to explore the intersection between religious interpretations of stewardship, sustainability, and resource management and their implications for climate policy formulation and implementation in Saudi Arabia. This thesis investigates the climate politics of the Kingdom of Saudi Arabia within the context of its religious and cultural identities. Therefore, the main research question of the thesis is how religion influences climate politics and policy formulation in the Kingdom of Saudi Arabia.

1.4 Thesis disposition

This thesis is divided into six chapters. The second chapter moves straight into this thesis's overarching topic: Religion and Climate Politics in Saudi Arabia. This chapter is divided into three subsections that will explore this thesis's conceptual framework and its applicability to Saudi Arabia. In the first subsection, the greening of religion thesis will be explored, and the discussion will delve into the evolving relationship between religion and environmentalism, emphasizing its relevance and impact in the contemporary world. It will examine the role of religious actors and institutions in advocating for environmental policies and promoting sustainability initiatives. Furthermore, the second subsection of the chapter will investigate the nuances of Islamic environmentalism, considering both mainstream and political Islam perspectives. The third subsection will provide an in-depth analysis of Saudi Arabia's domestic and international engagement in climate politics. It will explore the country's role, challenges, and policy approaches concerning climate change mitigation and adaptation efforts. This subsection will examine Saudi Arabia's domestic climate policies and initiatives, including its efforts to diversify its economy and reduce reliance on fossil fuels. It will also analyze the country's role in international climate negotiations, including its participation in the United Nations Framework Convention on Climate Change (UNFCCC) and its stance on critical issues such as emissions reduction targets and climate finance. Additionally, it will identify and assess the challenges faced by Saudi Arabia in addressing climate change, considering factors such as economic dependencies, geopolitical considerations, and societal expectations. The fourth subsection will explore the intersection of religion and environmentalism within the specific

context of Saudi Arabia. It will investigate the dynamics of the government-religion relationship and assess the extent to which religion influences climate politics in the country. By examining the role of religious institutions, leaders, and narratives in shaping environmental discourse and policy-making, this section aims to elucidate the potential contributions and limitations of religious environmentalism in Saudi Arabia's climate agenda.

Chapter three consists of a reflection on this study's methodological foundation and a case study as an analytical tool. Then, chapter four will delve into the foundational teachings of Islam and their implications for environmental ethics. It will explore how Islamic principles emphasize stewardship, balance, and responsibility towards the natural world by drawing upon the Quran, Sunna, Hadith (sayings of the Prophet Muhammad), and scholarly interpretations. Through a critical analysis of Islamic scriptures and ethical frameworks, this section aims to provide insights into the normative foundations of Islamic environmentalism. The second subsection of the chapter will examine the role of religious leaders, particularly within the Islamic tradition, in advocating for environmental protection and sustainability. It will analyze influential documents such as the Islamic Declaration on Climate Change and Pope Francis's encyclical Laudato Si', which underscore the moral imperative of addressing ecological crises. The third subsection will investigate the influence of Wahhabi interpretation, a conservative Islamic theological movement predominant in Saudi Arabia, on environmental policies and practices. It will analyze how Wahhabi doctrines and interpretations shape attitudes toward resource management and sustainability within Saudi society and beyond.

Chapter five will provide an overview and analysis of Saudi Arabia's climate policies and initiatives. It will examine the country's efforts to address climate change through regulatory frameworks, technological innovations, and international collaborations. The second subsection will investigate the role of religious institutions in shaping environmental policies, focusing on Saudi Arabia. It will examine how religious authorities and institutions engage with ecological issues, including their pronouncements, initiatives, and collaborations with governmental agencies. The third subsection will explore the reasons for the limited engagement of religion in climate politics in Saudi Arabia. It will examine various factors contributing to the marginalization or absence of religious perspectives in climate policy-making and advocacy efforts. Then, in the concluding chapter, some reflections are provided on the main arguments furthered in this thesis. But before we get there, a discussion of religion and climate politics will follow in the chapter ahead.

2. Conceptual Framework: Religion and Climate Politics in Saudi Arabia

2.1 Religious Environmentalism

The rise of climate change as a serious issue in international politics coincided with an increasing understanding that religions can contribute to environmental sustainability and the emergence of a religious environmental movement (Gottlieb, 2006) One of the main features of religions is that they can provoke a sociopolitical change, which can be limiting but also liberating in their outlooks; for example, in the twentieth century, religious leaders and theologians helped to give birth to progressive movements such as civil rights for minorities, social justice for people experiencing poverty, and liberation for women (Tucker & Grim, 2001, p. 3). The world's religions have been slow in responding to the ongoing environmental crises; however, considering their moral authority and institutional power, religions can significantly change attitudes, practices, and public policies toward the environment. Therefore, the greening of religion thesis posits that religious traditions and institutions have the potential to influence environmental awareness and action significantly. This assumption is, however, contested, and religious traditional practices and values can also be at odds with the normative goals of environmentalism (Kalland, 2005). Most of the major religions have anthropocentric worldviews that are primarily responsible for the ecological crisis and have contributed to environmental destruction rather than environmental protection; this religion hypothesis posed by Lynn White is argued and widely cited (White Jr, 1967).

Additionally, recent studies suggest that specific belief systems within certain religions pose obstacles to environmental mobilization, and there has not been a significant observable shift towards greater environmental consciousness within religious contexts (Taylor et al., 2016). Due to skepticism regarding the existence of anthropogenic climate change, some believers attribute spiritual causes to climate phenomena. There are two substantially different approaches, both referring to spiritual causes regarding climate change as (1) God's punishment for human sins or (2) humans' destiny and the looming end of times (Koehrsen, 2021).

However, it is also interesting how climate change can change religion. In several theories, scholars of religion, for example, in the anthropology of religion, have analyzed how religious modes of perceiving, acting, and thinking are dependent on human ecology (Bergmann, 2010, p. 20). For instance, hunters’ and gatherers' cultures are connected to specific modes of

religious symbolics, where patterns of belief are related not directly to local geography but to the culture of surviving in a specific environment (Bergmann, 2010, p. 20). Therefore, contemporary challenges of our time, such as climate change and its consequences, certainly will shape the religions, or they will adapt to address it.

Despite its relatively recent entry onto the global stage, climate change has emerged rapidly as a prominent topic in international politics and has swiftly become a central focus of worldwide discussions. However, climate change discussions are primarily focused on scientific research and findings, with technical experts and scientific committees like the IPCC at the forefront of advocating for future climate scenarios, carbon emission models, and finance models. Even the papal encyclical also recognizes the significance of climatic sciences by establishing the scientific knowledge base and referencing IPCC reports and other scientific research in the publication.

Successful science writer Michael Crichton, in his novel "State of Fear" says:

One of the most powerful religions in the Western World is environmentalism. Environmentalism seems to be the religion of choice for urban atheists (Nelson, 2011)which raises the question of whether it is a 'secular faith.'

Hulme argues that scientific accounts of climate change are more important than ever at the UNFCCC Conferences of the Parties (COPs), leading to religion being excluded from accounts of climate change sciences or activism (2016, p. 14). Discussions on climate change are predominantly science-based: future climate scenarios, carbon emission, or finance models are developed and advocated by technical experts and scientific expert committees such as the IPCC (Glaab, 2021). Even the papal encyclical acknowledges the critical role of climatic sciences when it spends the first part of the publication establishing the scientific knowledge base, making broad references to IPCC reports and other knowledge generated within the scientific community (Glaab, 2021). However, religious knowledge is seen to be different from scientific knowledge as it is value- and not goal-oriented (Sandal, 2011), therefore emphasizing the normative and ethical perspectives that religions, after all, religions 'have a special power to articulate moral intuitions, especially with regard to vulnerable forms of communal life.' (Glaab, 2021, p. 148) The ascent of global environmental politics has led to the formation of religious and environmental organizations dedicated to exerting influence on climate policies through grassroots activism and advocacy at both local and national levels (Kidwell, 2020).

Religious leaders and laypersons are increasingly advocating for environmental protection, with the Dalai Lama, Rabbi Ishmar Schorsch, Greek Orthodox Patriarch Bartholomew, and Seyyed Hossein Nasr being prominent examples (Taylor et al., 2016). Religious environmental activism similarly developed in international environmental politics settings: Faith-based organizations (FBO) had a strong presence at the 1992 Rio Summit and even more so at the more significant and parallel-running civil society-led Global Forum (Glaab, 2021). Furthermore, various environmental organizations and programs at the UN, such as the United Nations Educational, Scientific and Cultural Organisation, the United Nations Environment Programme or the UNFCCC, have established partnerships with religious organizations as part of an effort to culturally embed projects tackling environmental problems, with FBOs having been actively involved in the UNFCCC since its foundation (Glaab, 2021).

This trend has been accompanied by a growing overall involvement of civil society in global governance frameworks, with a particular emphasis on international climate politics. The number of climate-related non-governmental organizations (NGOs) has skyrocketed over the last years, and the number of participants and non-state actors taking part in the annual UN climate change conferences has risen steadily over the previous 20 years; the provisional total for COP28 suggests that 97,372 delegates have registered to attend the summit in person, with a further 3,074 attending virtually, this takes the overall total to 100,446 (UNFCCC, 2023). Within this more general context of rising civil society involvement, global governance has created an 'ideational opportunity structure' for FBOs to participate and engage in global political decision-making processes, with climate change politics being one important aspect of it (Glaab, 2021). The first-ever Faith Pavilion at a climate COP28 was a big success, with 70 sessions and 325 speakers, including prominent religious leaders, government ministers, and Indigenous people (ICSD, 2024). The Faith Pavilion at a UN Climate Change Conference, organized by the Muslim Council of Elders in collaboration with the COP28 Presidency, the United Nations Environment Programme (UNEP), and a diverse coalition of global partners such as the Interfaith Center for Sustainable Development, the Episcopal Diocese of California, the International Partnership on Religion and Development (PaRD), and the Peace Department, along with over 50 faith organizations, is strategically positioned at the core of COP28 (ICSD, 2024). With over 65 sessions, it served as a gathering point for religious leaders, representatives from civil society, Indigenous Peoples, scientists, youth, and political figures, situated adjacent to both the World Climate Action Summit and the negotiation zones (ICSD, 2024).

Religions are commonly recognized for providing value systems that enable a change in individual human-environment relationships. This may motivate transformations of individual behavior towards more sustainable collective practices (Gottlieb, 2006). However, religion does not only inspire individual practices; it is also seen to hold considerable political power to influence and support sustainable politics. Religions possess five critical assets that contribute to their influence: their ability to shape worldviews, their moral authority, their extensive base of adherents, their material and financial resources, and their capacity for community-building (Haluza-DeLay, 2014). Decisions taken by religious leaders can be funded and have normative power for believers, which is a potential contribution to combat climate change and meet sustainability goals.

The degree to which religions are becoming greener and positively impacting environmental sustainability remains an open debate. For the moment, most of the studies on Christianity in the Western World focus on this topic (Haluza-DeLay, 2014, p. 269; Hulme, 2016, p. 245). Less research has been done on Islam. Even though many of the regions where most Muslims live are highly vulnerable to climate change and Islam often assumes great societal relevancy in these regions, only a few social science studies have addressed the relationship between Islam and climate change (Hancock, 2018, p. 3).

2.2 Islamic Environmentalism

Islamic environmentalism has evolved from the 1960s onward; an original point of reference is a series of lectures by the Iranian-born Muslim philosopher Seyyed Hossein Nasr, published in 1968 (Koehrsen, 2021). Drawing on Sufism and the concept of the unity of the universe, he stresses the connections between environmental degradation and the spiritual and moral crisis of the modern world (Nasr, 1968). The field of Islamic environmentalism has expanded further through works of contemporary Islamic environmentalism figures like Mawil Izza Dien and Falzlun Khalid, whose studies have a unifying effect on Muslim environmentalists' society by engaging different branches of Islam (Koehrsen et al., 2019). Koehrsen argues that the diasporic background of many Muslim environmentalists and their focus on current societal challenges rather than historical sectarian struggles appears to facilitate such a unification (2019). Muslim environmentalists draw upon the Qur'an and Sunna to generate environmental

principles from them, thereby creating ecological interpretations of Islam and a set of Islamic environmental ethics (Abdelzaher et al., 2019, p. 626).

According to Karagiannis, it's clear that various Islamist parties, groups, and organizations, such as the Muslim Brotherhood is a former governing party in Egypt that has a clandestine history; Hamas and Hizb'allah are armed groups turned political parties that have acquired power at the local or national level in the Palestinian Territories and Lebanon, respectively; Jamaat-e-Islami is a small party in Pakistan that has espoused anti-Western views; Hizb ut-Tahrir is an international Islamist party that supports non-violent methods; and al Qaeda is a terrorist organization with a global reach, have embraced an Islamic interpretation of environmentalism, although their approaches may vary considerably (2015, p. 193).

Karagiannis questioning why different Islamists have decided to develop an environmental agenda. Is the newly found Islamist environmentalism the result of a conscious strategic decision, or is it just an ad hoc response to people's concerns about environmental issues? (2015)

He argues that there are four reasons that may account for the emergence of this political trend. According to Karagiannis, the first reason it is a defining belief for Islamists is that religion must dictate every aspect of life, both personal and societal (2015). They heavily rely on Islamic sources to ensure legitimization for their campaigns: for example, Hizb ut-Tahrir and Hizb'allah, and to a lesser degree, Hamas and al Qaeda have routinely supported their situation analysis and policy proposals with Quranic verses and Hadiths; they have felt obliged to address environmental issues, particularly those relating to water and trees, which are constantly mentioned by Islamic sources (Karagiannis, 2015). Secondly, Islamists have embraced environmentalism due to the widespread recognition and legitimacy of concerns surrounding global warming and climate change over recent decades. The escalation of environmental issues such as deforestation, droughts, and pollution in various countries has compelled many political parties, trade unions, and NGOs to address these issues. As a result, Islamists may find opportunities to establish international connections through shared environmental concerns. In effect, Islamist environmentalism can bridge the ideological gap between political Islam and the international environmental movement by encouraging action against Western capitalism, a supreme 'common enemy' that threatens the planet (Karagiannis, 2015, p. 194).

Third, action on environmental issues can be an effective tactic for Islamist groups to mobilize support from certain population segments. This is especially important for groups like Hizb'allah, which aims to attract a larger audience (Karagiannis, 2015, p. 195). By adopting an environmentally friendly agenda, Hizb'allah could improve its image and gain an advantage over its main Shia competitor in Lebanon, Amal. In addition, Hizb'allah could appeal to non-Shias, such as educated and urbanized Christians and Sunnis, who may be critical of the group; similarly, the Muslim Brotherhood's environmental campaigns were likely intended to mobilize apolitical action among Egypt's disenfranchised youth after the revolution. By adopting a green agenda, Hamas could increase its appeal among Palestinians who support competing groups such as Fatah and the Islamic Jihad (Karagiannis, 2015, p. 195). Hizb ut-Tahrir could also use environmental issues to unite its global membership and raise more significant issues that everyone cares about. Focusing on environmental issues could also give Jamaat-e-Islami an edge over other Islamist parties in Pakistan. Even Al Qaeda has recruited Western Muslims and converts to Islam who are presumably aware of or concerned about environmental problems (Karagiannis, 2015, p. 195). In summary, caring about the environment can only benefit Islamist groups politically.

Finally, the promotion of environmental agendas could serve as a political weapon against the West and its principal ally in the Middle East, Israel (Karagiannis, 2015). For many Islamists, the effects of global warming and environmental degradation highlight capitalism's inability to create a sustainable global order. They see the overexploitation of resources by Western corporations as stemming from greed and a disregard for divine principles. Additionally, they interpret this as evidence of the superiority of Islam over Western civilization. Moreover, Islamist concern for the environment often involves blaming Israel for exacerbating environmental issues in Lebanon and the Palestinian Territories.

However, each Islamist group has adopted a different scale of engagement. Indeed, there are three types of Islamist environmentalism: localized, glocalized, and globalized (Karagiannis, 2015, p. 196). For example, the Muslim Brotherhood and Jamaat-e-Islami have formulated a localized environmental agenda in order to enlarge their constituencies in Egypt and Pakistan, respectively (Karagiannis, 2015, p. 196). Hamas that is confronting Israel, the environmental issues are locally significant and serve a higher cause. On the contrary, al Qaeda and Hizb ut-Tahrir have aimed at a global audience, portraying environmental problems as proof of capitalism's inherent failure (Karagiannis, 2015, p. 196). Between the localized and the

globalized eco-Islamists stand glocalized groups like Hizb'allah that address global environmental issues while engaging in local activities (Karagiannis, 2015, p. 196).

Islamists do not always share the same view on a specific environmental issue. For example, Osama bin Laden obviously had a positive view of the Kyoto Protocol agreement (Karagiannis, 2015), while Hizb ut-Tahrir perceived it as a 'Western plot' to prevent rising powers, including the future Islamic state, from becoming industrialized (Karagiannis, 2015). However, there are meeting points where they share similar opinions. Desertification and lack of clean water sources push Islamist groups to conduct more studies. Also, Islamists have avoided discussing the issue of nuclear energy and its impact on the environment (Karagiannis, 2015).

Yildirim gives different lines of argumentation to explain Islamist disinterest in the environment: the first reason why Islamists engaged less with environmentalism is that Anti-western sentiment is the common thread shared by Islamists the world over (2016). This is due in part to the utter failure of Western-imported political systems, secular nationalism, capitalism, and socialism, to bring power and prosperity to Muslim-majority countries (Yildirim, 2016). By touting 'Islam is the solution,' political Islamists attempt to appropriate carefully selected Islamic tenets and symbols into a modern state in order to alleviate their respective countries' political repression and economic stagnation (Yildirim, 2016). Islamists criticize Western attitudes toward nature, which they see as objectifying and dominating, contrasting it with Islamic principles of stewardship (Yildirim, 2016). Environmental concerns are often sidelined in Islamist discourse, used primarily as a means to criticize the West rather than as an intrinsic value. Population growth is seen as a means of countering Western dominance, leading to resistance against birth control measures (Yildirim, 2016). Environmental issues are considered "low politics" compared to more immediate concerns, such as poverty and development in developing nations, including Muslim-majority countries, which face challenges in addressing environmental issues due to limited resources and the prioritization of economic development (Yildirim, 2016). The focus of Islamist parties on social welfare and economic development often sidelines environmental concerns. Political dynamics, such as in Turkey, may force Islamist parties to balance economic development with environmental considerations to retain power(Yildirim, 2016).

Yildirim suggests that three possible explanations for why Islamists do not care about the environment are that:

1. they are almost always in opposition.
2. Islamists do not realize that there is a rich tradition of environmentalism in Islam.
3. A final alternative explanation lies in their notoriously selective reading of sacred texts.

On the other hand, religious organizations with environmental agendas in Muslim-major countries, as well as in Muslim minor countries, use strategies to implement Islamic environmentalism that Koerhsen described in three categories:

2 campaigning publicly to raise greater concern about climate change and lobbying among political decision-makers (e.g., through public statements, media campaigns, and advocacy work),
2 materializing change by undertaking socio-technological measures to reduce carbon emissions(e.g.,switching energy consumption of religious buildings to renewables), and
2 disseminating pro-environmental values and worldviews to their religious constituencies, potentially influencing their lifestyles (e.g., through religious school teachings and messages during religious services) (Koehrsen, 2018, p. 6).

One prominent example of public campaigns by Muslim environmental organizations is the 2015 International Islamic Climate Change Symposium in Istanbul, which was summarized by the "Islamic Declaration on Global Climate Change." Shortly following Pope Francis' "Laudato Si," Islamic Relief Worldwide, the Islamic Foundation for Ecology & Environmental Sciences (IFEES), and GreenFaith launched this declaration at an international symposium in Istanbul that preceded the United Nations Climate Change Conference in August 2015 (COP21) (Ali, 2016; Kaminski, 2019). The declaration is a symbiosis of scientific and religious knowledge, and it tries to initiate the action of political leaders, faith leaders, and business people, as well as the "oil-producing states," requesting them to lead the way in phasing out their greenhouse gas emissions as early as possible. Some of the scholars were optimistic about the outcomes of the declaration (Schaefer, 2016, p. 14), assuming that "If imams are committed to reminding believers of their moral responsibilities, it will impact Muslim mitigation efforts."(Ali, 2016)

However, since the declaration is non-binding and received far less media attention than papal "Laudato Si," its impact and further practical implementation remained unclear (Hancock, 2018, p. 20).

In terms of materialization, a prominent example can be taken from Indonesian Muslim environmental organizations, which mainly focus on local environmental issues, such as deforestation and agriculture, which is the main income for the local population. Actions taken in some regions of Indonesia show that eco-pesantrens can be a solution; these include reforestation activities that generate an emotional attachment to nature (Mangunjaya & McKay, 2012). As such, eco-pesantrens have implemented the programmatic ideas of *hima* (environmental management zones) and *harim* (inviolable sanctuaries) and established zones where each student has to take care of his or her own tree (Koehrsen, 2021). These pesantrens raised groundwater levels in arid land significantly through tree planting. Interestingly, the driving force behind this was the need for spiritual cleaning before prayer. To procure sufficient water for cleaning before each of the five daily prayers, together with his students, continuously planted trees to better absorb rainfall, finally leading to the creation of a creek and a small river. This example illustrates that the main rationale behind "religious environmentalism" may be spiritual needs instead of environmental considerations (Koehrsen, 2021).

Apart from reforestation, eco-pesantrens' activities provide alternatives to logging to generate income for local communities by promoting stock farming, fruit/vegetable planting, and agricultural training (Amri, 2013, p. 86).

The examples mentioned above illustrate the potential of powerful Muslim organizations to promote awareness about climate change. Based on these examples, Indonesia is sometimes portrayed as a pioneering country and role model for Muslim environmentalism (Mangunjaya & Praharawati, 2019). Regarding value dissemination, Muslim initiatives have made efforts to raise awareness about climate change and environmental degradation and promote behavioral changes among their members by utilizing various educational programs, workshops, information guides, and newsletters (Hancock, 2019, p. 297). Examples of these initiatives include pro-environmental education in religious schools across Indonesia or the "Green Hajj Guide," aiming to create greater environmental concern among pilgrims (Mangunjaya, 2022, p. 110) These initiatives aim to encourage a more environmentally conscious lifestyle among Muslim communities and to spread the message of sustainability beyond their circles.

Muslim organizations and leaders are actively engaging in public campaigning activities to raise awareness about climate change and its impact on the environment. They have been launching public statements and advocating for stronger climate policies among governments to ensure a sustainable future for generations to come. In 1983, the Saudi government enlisted

a handful of Islamic scholars from the University of Jeddah to create an environmental policy centered on Islam, and the Kingdom hired several non-Saudi environmental experts, including Iraqi Mawil Izzi Dien and American Abd-ar Rahman Llewellyn, to head the Meteorology and Environmental Protection Administration of Saudi Arabia, which is heavily based on Islamic environmentalism (Foltz et al., 2003).

The next subsection will cover Saudi Arabia's domestic climate policies, initiatives, and its role in international climate negotiations. It will also analyze the challenges faced by the country in addressing climate change, such as economic dependencies, geopolitical considerations, and societal expectations.

2.3 Saudi Arabia and Climate Politics - Domestic and international climate politics, role, challenges

Holding around 22 percent of the world's proven petroleum reserves, Saudi Arabia's economy is highly reliant upon oil and gas, the exportation of which continues to account for over 60 percent of government revenue (Al-Sarihi, 2019). Like other large producers of carbon-intensive fossil fuels, Saudi Arabia finds itself at the center of the global climate conundrum; increasingly recognized as a major fossil fuel *producer*, *exporter*, *subsidizer*, and *consumer*, it also stands to become an early and significant *victim* of climate change since its arid geography and harsh summer climate are highly vulnerable to damage (Pal & Eltahir, 2016, p. 197). At the same time, some observers suspect that climate action could provoke undesirable results, leaving oil-exporting states with insufficient revenues to maintain public order (Van de Graaf & Verbruggen, 2015). Therefore, according to Krane, this situation urges policymakers in oil-producing countries to reassess long-term assumptions about the oil business in two ways: by promoting diversification into alternate businesses and by protecting and enhancing the competitiveness of their oil industries (2020). These two strategies can be used at the same time. The first one is to protect the national budget of the Kingdom when global oil demand decreases, and the second strategy is used to make the current oil industry more competitive to direct challenges of climate policies (Krane, 2020).

On the international level, Saudi Arabia has historically obstructed international climate agreements, fearing harm to its business (Depledge, 2008). Depledge described the tactics used

by Saudi officials, mostly represented by the national petroleum ministry, on climate negotiations as showing skepticism toward climate science, blocking progress through negotiating techniques, and aligning with coal lobbies (2008). This approach, however, gained Saudi Arabia a negative image as a main “antagonist” in climate negotiations. Even though Saudi Arabia never withdrew from the climate agreement, Paris Agreement, and Kyoto Protocol, the logic behind it is simple: if the country withdraws from the negotiations, it will not have a chance to obstruct, prolong, or influence the final decision in the United Nations Framework Convention on Climate Change (UNFCCC)(Depledge, 2008). Yet another strategy used by Saudi officials seeks to lobby the international community to moderate its targets for greenhouse gas emissions and accept a higher level of human climate damage (Krane, 2020, p. 301). While highlighting this, Saudi Arabia officials put themselves on a list of developing nations; the logic Saudi officials: the costs of compliance with 2 °C emission limits are unreasonably high, and more climate damage would be preferable to the economic disruption implied by ongoing and rapid decarbonization (Krane, 2020, p. 319).

The Kingdom also plans strategic investments to prolong the use of gasoline in transportation by maximizing the internal combustion engine's efficiency so that oil-fueled transportation remains cost-competitive with electric vehicles (Krane, 2020, p. 313). Saudi Aramco is using a strategy that mirrors historical approaches of market control by oil cartels, ensuring preferential access for their crude oil by purchasing oil and gas infrastructure in importing countries, particularly refineries, to ensure market access for their crude oil (Krane, 2020, p. 315). Saudi Arabia joins selectively to climate action by supporting initiatives like carbon capture and storage (CCS) and flaring reductions or advocating for retaining fossil fuels in the energy mix alongside renewables, emphasizing technological solutions to mitigate emissions (Krane, 2020, p. 316).

On the domestic level, Saudi Aramco focuses on non-combustion uses, such as producing petrochemicals, which have seen robust demand growth. For instance, plastic is crucial for the manufacture of solar panels, wind turbine blades, thermal insulation, batteries, and other components of electric vehicles (IEA, 2018). Investments in petrochemical plants, both domestically and internationally, are made to diversify revenue streams. Petrochemicals offer a climate-proof use for hydrocarbons by sequestering carbon in finished products (Krane, 2020, p. 312). One of the main arguments of Saudi Arabia in the international arena on mitigation efforts is that their crude oil has a low carbon intensity, which means that they are applying

efficient production methods during extraction and transportation; this could provide a price advantage in countries with carbon taxes based on carbon intensity (Krane, 2020, p. 312). These strategies demonstrate Saudi Aramco's efforts to adapt to the clean energy transition while safeguarding its core business interests.

It's noteworthy that Saudi Arabia has taken significant steps to engage in climate politics and mitigate the impact of climate change on a domestic level. This has been achieved through the reduction of energy assets loss, particularly by capturing waste methane and redirecting it to the power sector through Saudi Aramco's Master Gas System, thus helping to reduce GHG emissions (Krane, 2015), which was made possible by the nationalization of the oil industry in 1980. As a result, greenhouse gas (GHG) emissions have significantly dropped over the years. Fugitive (non-combustion) CO2 from the oil industry was another major source of emissions, which was curtailed after nationalization, dropping below 50% of total CO2 emissions by 1979 and reaching 2.2% in 2008 (Krane, 2020, p. 305). However, in 2008, the power sector in the Kingdom became the largest source of carbon dioxide emissions, responsible for 43% of GHG emissions, followed by transport at 27% and industry at 17%, after the reduction of upstream fugitive emissions (Krane, 2020, p. 305).

Water scarcity is one of Saudi Arabia's main challenges; despite being one of the wealthiest nations, it is also one of the poorest in terms of natural renewable water resources (DeNicola et al., 2015, p. 343) . Desalination of seawater is one of the main sources of water. Saudi Arabia is the world's largest producer of desalinated water, with the Marafiq complex in Jubail being the largest independent water and power project in the world (DeNicola et al., 2015, p. 347). Desalination technology now supplies 60% of the water demand in the Kingdom, producing more than 70% of its drinking water and 5% of its electricity supply (Zaharani et al., 2011). However, the desalination process requires significant capital and energy, and major transmission lines are needed to transport desalinated water from plants to cities several hundred kilometers away (Drewes et al., 2012). The process is fueled by oil, with an estimated half of domestic oil production in the Kingdom being used for desalination (Drewes et al., 2012). The increasing demand for water, which is currently growing at a rate of around 9% annually and is estimated to double by 2035, could have serious implications for the Saudi economy as it will also increase domestic oil consumption (DeNicola et al., 2015, p. 347). Seawater desalination has numerous benefits for human health. However, the environmental impact of the chemical discharges and byproducts cannot be ignored. The concentrated brine

that is discharged from the desalination plants can increase ocean salinity and negatively affect marine life, which is a major concern (Lattemann & Höpner, 2008). The intake pumps of these plants can also suck in sea life, such as jellyfish, plankton, and algae, along with other suspended solids, therefore there is a need to improve the desalination process to minimize its impact on the environment (DeNicola et al., 2015, p. 347).

Aware of these challenges, Saudi Arabia has discussed economic diversification for decades, aiming to reduce its dependence on fossil fuels and build a more sustainable economy. However, serious action toward such economic reform was not taken until after the oil price drop in mid-2014 (Al-Sarihi, 2019). In response, in 2016, the Vision 2030 program was launched to modernize and diversify the country's economy beyond the oil sector. It includes several ambitious goals, such as increasing the share of renewable energy in the country's energy mix and improving energy efficiency in key sectors like construction and transportation (Alomari & Heffron, 2023). It highlights that the government recognized the importance of promoting environmental sustainability and has launched various initiatives to address environmental challenges.

As part of Vision 2030, there are Saudi and Middle East Initiatives (SGI and MGI), which have three overarching targets: emissions reduction, afforestation and land regeneration, and land and sea protection (SGI, 2024). The Kingdom has committed to having 50% of its power generated from renewable sources by 2030. Beyond transforming its domestic energy mix, SGI is steering ambitious initiatives to reduce emissions by investing in new energy sources, improving energy efficiency, and developing a carbon capture and storage program (SGI, 2024). One of the main aims of initiatives is to plant 50 billion trees across the Middle East, which is equivalent to restoring 200 million hectares of degraded land. Out of this, one-fifth of the trees (10 billion) will be planted within Saudi Arabia's borders, while the remaining 40 billion trees will be planted across the region in the coming decades. The successful achievement of this target will open up new employment opportunities and fortify the resilience of remote communities. Additionally, these trees will provide various other benefits, such as stabilizing soils, safeguarding against floods and dust storms, and reducing CO2 emissions by up to 2.5% of global levels(SGI, 2024). Additionally, under the Saudi Green Initiative, Saudi Arabia has committed to protecting 30% of its terrestrial and marine area by 2030 (SGI, 2024).

2.4 Saudi Arabia and Religious Environmentalism

2.4.1 Government-religion relationship

According to the 1992 Basic Law of Governance, the country's official religion is Islam, and the constitution is the Quran and Sunna (traditions and practices based on the life of the Prophet Muhammad) (Freedom, 2022). The legal system is based largely on *shari'a* as interpreted by the Hanbali school of Sunni Islamic jurisprudence; freedom of religion is not provided under the law (Freedom, 2022). The law bans "the promotion of atheistic ideologies in any form," "any attempt to cast doubt on the fundamentals of Islam," publications that "contradict the provisions of Islamic law," and other acts, including non-Islamic public worship, public display of non-Islamic religious symbols, conversion by a Muslim to another religion, and proselytizing by a non-Muslim (Freedom, 2022). The relationship between state and religion dates back to the expansion of the Saud Emirati in the 18th century. Traditional and modern Muslim scholars believe in the inseparability of religion and state, and the government is considered vital due to its lofty duty to protect religion and Islamic values (Al-Atawneh, 2009, p. 724).

Shaykh Mohammad Ibn 'Abd al-Wahhab's school, the eponymous founder of Wahhabism or Salafism as it is known today, is the only one from which the Saudi state recognizes and draws its religious discourse, and the religious establishment is based on Wahabism, and its leaders are chosen from among the sect's senior clerics (Alsaif, 2013, p. 377) Shaykh Muhammad Ibn 'Abd al-Wahhab (d.1792) divided the ruling hegemony of the state between the *'ulama'* (religious officials; 'divines'), who were the authorities in matters of jurisprudence and the '*umara'* (political rulers), who ruled and presumably consulted the '*ulama.'*(Al-Atawneh, 2009, p. 727)

According to Al-Atawneh, Abd al-Wahhab believed that the *shari'a* needed the ruler's enforcement for its implementation, while the state needed the *shari'a* for its legitimacy; however, he did not provide a specific model for cooperation between the 'ulama' and rulers nor did he outline the structure and functions of the Wahhabi state (2009).

Today, two main views have emerged: one maintains that the *'ulama'* have ceased to constitute an autonomous body but continue to have some sway over royal policies and decisions; the other maintains that the *'ulama'* have lost their power in both the religious and the political

spheres (Al-Atawneh, 2009). Aharon Layish believes that modern *'ulama'* no longer hold a position of power alongside the '*umara'*, but they are still an integral part of the political elite and play a crucial role, particularly during times of crises (2014). Government activities became more bureaucratic, and society became more affluent; they became more open to alternative forms of knowledge and exposure to new media, ultimately leading to the decline of certain activities of the '*ulama.'*(Layish, 2014)

Al-Rawaf stressed that:

The *'ulama'* primarily focuses on social matters and does not engage in politics. They have minimal or no impact on significant policies related to foreign affairs, internal security, economic growth, oil production and pricing, wealth distribution, regional allocation, or political involvement (1980).

Al-Atawneh argues that analyzing the '*ulama'/umara'* power structure in terms of predomination is somewhat problematic for at least three reasons:

- first, there is little doubt that distinguishing position from influence is nearly impossible,
- secondly, the distribution of power between *'ulama'/umara'* was never clear enough throughout the more than two centuries of mutual relations.
- Thirdly, attributing the decline of the *'ulama'* to their incorporation into state administration requires further consideration. It is possible to assume that, via this incorporation, the *'ulama'* increased their influence over official policies and governmental circles. In other words, the *'ulama'* became players from within the power structure by holding official positions (2009).

Over time, the *'ulama'* cooperated with the ruler and expanded their influence in various areas, including legal and religious affairs. The legal system primarily relies on regulations rooted in the Quran and Sunna. While all judges receive religious training, they also possess expertise in non-religious legal fields such as commercial and financial matters, as well as criminal law, particularly in the areas of cybercrimes, terrorism, and electronic crimes. In recent years, there has been a shift towards an international model of jurisprudence, moving away from a strict reliance on religious texts (Freedom, 2022). Law on religious matters, which often affects civil law, is developed by *fatwas,* must be based on the Quran and Sunna, issued by the 21-person

Council of Senior Ulama that reports to the King (Freedom, 2022). The law specifies a hierarchical organization and composition of the Council of Senior Ulama, the Permanent Committee for Scholarly Research and Religious Rulings, and the Office of the Mufti, together with their functions; the Council of Senior Ulama is headed by the Grand Mufti and is composed of Sunni religious scholars and jurists, 18 of whom are from the Hanbali school of jurisprudence, with one representative of each of the other Sunni schools (Malaki, Hanafi, and Shafi'i)(Freedom, 2022). Members of the Council are chosen by the King's discretion and serve renewable four-year terms, with many serving for life (Freedom, 2022).

The counterterrorism law criminalizes, among other things, "calling for atheist thought in any form or calling into question the fundamentals of the Islamic religion." (Freedom, 2022) It also criminalizes "anyone who challenges, either directly or indirectly, the religion or justice of the King or Crown Prince." (Freedom, 2022) The law also bans publications that "contradict the provisions of Islamic law" and other acts, including non-Islamic public worship, public display of non-Islamic religious symbols, conversion by a Muslim to another religion, and proselytizing by a non-Muslim (Freedom, 2022).

Public school students at all levels receive mandatory religious instruction based on Sunni Islam, according to the Hanbali school of jurisprudence. Private schools must also follow the official, government-approved religious curriculum, as well as private international schools are required to teach Saudi students and Muslim students of other nationalities an Islamic studies course, while non-Muslim, non-Saudi students may receive a course on Islamic civilization or alternative coursework in place of the curriculum designed for Saudi students; courses entail one hour of instruction per week (Freedom, 2022). Government universities provide training in all four Sunni schools of jurisprudence, with a focus on the Hanbali school (Freedom, 2022).

They increased their power by gaining control over other ministries and religious agencies, such as the Ministry of Justice, the Ministry of Islamic Affairs and Endowments, the Ministry of Pilgrimage, and the supervision of mosques and charitable trusts. Additionally, they expanded their influence over agencies such as the Committee of Commanding Good and Forbidding Wrong, Preaching and Guidance of Islam at Home and Abroad, Notaries Public, girls' Education, the World Muslim League, and the World Assembly of Muslim Youth (Al-Atawneh, 2009).

The '*ulama'* still holds a prominent position in Saudi Arabia by affecting social and domestic policies as well as molding the country's socio-cultural image. Moreover, in Saudi Arabia, the religio-legal opinion (*fatwa, pl. fatawa*) is still used not only as a legitimizing basis for government policy but also as an instrument in its implementation, as witnessed in at least two different areas: legislation and the endorsement of political decisions (Al-Atawneh, 2009, p. 729). In the Saudi legal system, political and religious institutions are the main system authorities, divided into two components: one based on the *shari'a* and one on political authority (*siyasa*). The first, grounded in the application of the *shari'a,* is articulated primarily by *fatwa,* whereas the second consists of royal decrees (Al-Atawneh, 2009, p. 730). Both royal decrees and *fatwas* play important roles in Saudi Arabia's legal and political landscape. While the King and his representatives issue royal decrees to enact legislation or other political decisions, they may not always align perfectly with *shari'a* law. In such cases, *fatwas* are crucial in providing religious justification for these policies that must still adhere to *shari'a* principles. Together, these two components work hand-in-hand to ensure that Saudi Arabia's legal system remains grounded in both secular and religious considerations.

According to the *shari'a,* the fatwa is a non-binding regulation; its purpose is to be informative and non-obligatory; however, a royal decree can render a fatwa into a binding law (Al-Atawneh, 2009, p. 730). The head of the social religious establishment that can issue fatwa is The Council of Senior Ulama; it was established by a royal decree in August 1971, and, as its name indicates, its members are supposed to be the most learned in matters of the *sharia* (Alsaif, 2013, p. 378). Analysis of validation of the landing of US troops in Saudi Arabia during the Gulf War through issuing *fatwa* shows the extensive use by the *'ulama'* to emphasize the authority and even religious duty of the ruler, being the nation's leader of the Imam (who is the King), to take measures that maintain the public's welfare, the principle of *maslaha* (Al-Atawneh, 2009, p. 733). According to the Council of Senior Ulama, when the state is in danger, it is the duty of the Imam (in the case of Saudi Arabia King) to take necessary steps to remove that danger, which may include requesting aid from non-Muslim foreigners. The Council emphasizes that the King has absolute authority by stressing religious obligation as per classical Muslim theory (Al-Atawneh, 2009, p. 733). Political and religious authorities often cooperate and even synchronize their actions, as evident in legislation and the validation of political decisions; therefore, it is difficult, if not impossible, to dichotomize the 'social' and the 'political' and negate their mutual influence (Al-Atawneh, 2009, p. 733).

Therefore, Al-Atawneh characterizes the Saudi monarchy as neither theocratic nor secular in the Western sense. He emphasizes that it is not enough to assume that the Saudi monarchy relies entirely on Wahhabi or Islamic polemics regarding governance because these fall short of describing how an Islamic state should be and function; the Saudi monarchy is best described as a 'theo-monarchy' shaped by religion and long-standing religio-cultural norms and based on an ongoing compromise between existing religious institutions and the monarchy (2009).

2.4.2 Does religion have a role to play in Saudi Arabian climate politics?

Engagement with Islamic Environmentalism and Saudi 'theo-monarchy' started in 1983, the Saudi government enlisted a handful of Islamic scholars from the University of Jeddah to create an environmental policy centered on Islam, and the Kingdom hired several non-Saudi environmental experts, including Iraqi Mawil Izzi Dien and American Abd-ar Rahman Llewellyn, to head the Meteorology and Environmental Protection Administration of Saudi Arabia, which is heavily based on Islamic environmentalism (Foltz et al., 2003). One of the most well-known environmental conservationists in Saudi Arabia is Othman Abd-ar-Rahman Llewellyn. Llewellyn is an Environmental Planner who has been working at the Department of Protected Area Planning in the Saudi Wildlife Authority since 1988. He is associated with the International Union for Conservation of Nature (IUCN) Commissions dealing with Protected Areas, Environmental Law, the Species Survival Commission, and the Arabian Plant Specialist Group. His research focuses on various topics, including Islamic Environmental Law and Ethics, Traditional Conservation Practices, and Protected Area System Planning. Llewellyn actively participates in conferences and workshops related to Islamic Environmental Law and Ethics. His primary initiative is the Jabal Aja biosphere reserve in the Hail region of North Eastern Saudi Arabia, which he established to revive the *Hima* system (IFEES, 2024). The concept of *hima*, which means reserved pasture, existed in the Middle East before Islam, where trees and grazing lands were protected from indiscriminate harvest on a temporary or permanent basis, but it was treated as a private reserve for powerful chieftains who were said to have used it as a tool of oppression (Lutfallah, 2006, p. 213). With the emergence of Islam, its function changed; it became a property dedicated to the well-being of the whole community around it (Lutfallah, 2006, p. 213). Although there is widespread official recognition of the value of *himas* in Saudi Arabia, the government issued a royal decree in 1954 to declare the *himas* as public lands (Lutfallah, 2006) managed by the Ministry of Agriculture of Saudi

Arabia. Therefore, the work done by Llewellyn in reviving *himas* is important as part of Saudi Green Initiatives.

Another point to mention is a religious pilgrimage, where the government has to deal with the activities of the *Hajj,* such as solid waste, liquid waste, freshwater use, and greenhouse gas (GHG) emissions. Every year, worshippers visit Mecca in Saudi Arabia to perform *Hajj,* and in 2018, Mecca hosted more than 2,300,000 Muslims, and the rate of increase was projected to be 13% per year (Abonomi et al., 2022, p. 133). Except for regular liquid and solid waste, greenhouse gas emissions, which are the main attributes of tourist activities, there is an additional liquid waste from animal slaughter; with more than two million Muslims performing Hajj, it is estimated that more than 1.5 million sheep, goats and camels are slaughtered during the Hajj period (Abonomi et al., 2022, p. 136). One study conducted to investigate the approaches that slaughterhouses applied in disposing the waste from animals indicated that all waste, including liquid waste such as blood and cleaning water, is discharged in the Valley named 'Al-Haraman,' which is in the north-eastern part of Mecca, without any treatment, which is certainly harming the quality of soil, air, and groundwater quality (Abonomi et al., 2022, p. 136) .

The government of Saudi Arabia has set various strategies and policies to mitigate the impact of the Hajj activities on environmental sustainability - such as the *Green Hajj* project, the *Prepared Meal* project, and an *Environmental Charter* (Abonomi et al., 2022, p. 146) .

According to Abonomi, these measures have either not been implemented or have been insufficient to significantly improve the Hajj's sustainability due to the lack of collaboration between key stakeholders from the public and private sectors in implementing environmental projects (2022, p. 146). Previously published literature, scholarly research articles, and conference proceeding papers, Methodology for Studying the Influence of Religion on Climate Policy Formulation in Saudi Arabia

3. Methodology

In the upcoming chapter, I will outline the methods selected for my research and address the associated challenges. The first part will focus on the case study as a research approach, highlighting both its benefits and limitations. The second section will explore the literature

review method, sharing insight into how it was executed. In the last section, the limitations of the study are described.

3.1 The case study approach

The aim of this thesis is to provide an overview of the greening of religion thesis, emphasizing its relevance and impact in the contemporary world, investigate the historical and contemporary roles of Islamic principles and teachings in shaping climate politics and environmental policies, and examine the extent to which religious leaders, institutions, and texts influence governmental decision-making processes related to climate change mitigation and adaptation strategies. The case of Saudi Arabia was chosen due to its high vulnerability to climate change and the impact of religion on Saudi citizens' daily lives.

The case study approach involves detailed and intensive analysis of a single case, providing rich and nuanced data (Clark et al., 2021, p. 59). The particular case of the study of religious influence on climate policy formulation in Saudi Arabia is a synergy of unique and representative case studies at the same time (Clark et al., 2021, pp. 60-61). In terms of the religious and cultural landscape, it is a unique case, since there is no similar state like Saudi Arabia. In terms of representativeness, it is a Middle Eastern country with environmental issues with similar problems to other Gulf states. In terms of external validity or generalizability of the study, the knowledge produced from this study applies only to a few countries, including Qatar and Kuwait, since the ideologies of these countries have a lot of similarities. However, further generalization of findings is not possible because the case study does not aim to do it (Clark et al., 2021, p. 61).

3.2 Data collection

Data collection involved a literature review and background talks with experts, as well as physical participation in the Conference of Parties in Dubai at the end of December 2023. I conducted the literature review by gathering existing literature from Internet resources and obtaining materials directly from authors. I collected English-language articles using Google Scholar and utilized keywords such as Islamic environmentalism, Wahhabism, Hanbali School of Law, religious environmentalism, Saudi Arabia and climate politics, climate change and religion, climate change, and Islam. I focused on articles published within the past 10 to 15

years to ensure the information referenced was up to date. Additionally, I used government and sponsored web pages as well as PDF documents containing information on these topics.
The narrative literature review was applied as a compulsory part of the research project (Clark et al., 2021, p. 84), and most of the key insights were found by this data collection method. Data was triangulated by reviewing Western and local scientific articles that were translated into English. As well as background talk in a COP28 while participating in activities of Faith Pavillion.

3.3 Limitations of the study

The limitations encompass a range of factors, including language barriers. Many governmental documents, websites, and sacred texts are in Arabic and do not have open access. This lack of open access to a significant portion of literature and official documents related to religious interpretations and policy formulations may lead to misinterpretation or incomplete understanding of essential concepts. Furthermore, the decision-making processes and interactions between religious authorities, government officials, and other stakeholders in Saudi Arabia are not transparent. This lack of transparency poses challenges in accurately tracing the influence of religion on climate policy formulation and understanding the underlying dynamics. Local Saudi authors seem biased since their publications are under Saudi Universities' supervision, and their articles are very positive and loyal to the government.

In Saudi Arabia, there is a conservative societal and religious atmosphere where conversations about certain topics, particularly those concerning religion and politics, may be approached with caution or suspicion. While being in an Expo Pavillion of Saudi Arabia in Dubai Expo City, a few times approached the official representatives of Saudi delegations, where they were unavailable for comments.

4. Normative context of Islamic environmentalism 4500

4.1 Islamic Teachings and Environmental Ethics 1300

The chapter primarily focuses on Ottoman Llewellyn's theories and insights in "Basis for a Discipline of Islamic Environmental Law." Throughout the chapter, this author's work serves as the cornerstone for understanding the subject matter at hand. His research, analysis, and

interpretations are extensively explored and referenced, providing a comprehensive framework for the discussion. By delving into the ideas put forth by this author, the chapter offers valuable perspectives and contributes to a deeper understanding of the topic within the broader scholarly discourse.

According to Llewellyn, although environmental law is not yet recognized as an independent discipline within Islamic law, ample bases exist for its development because environmental law can be derived from the objectives, principles, precepts, and instruments of Islamic jurisprudence, as well as the myriad substantive rulings of the *shari'a* that pertain to the environment (2003). In Islamic civilization, the Law, or *shari'a*, is perceived differently; it is literally the Way, the path to the water, the source of life (Llewellyn, 2003, p. 3). *Fiqh*, the science of law, means understanding how to do the will of the Merciful, Compassionate Lord of all beings to live life – individually and collectively – in the most moral and ethical way (Llewellyn, 2003). The *shari'a* embraces in its scope every human act, including religious devotions and purely ethical issues, as well as the various fields of law known to the modern world, such as constitutional and international law, family law, penal law, law of contracts, property law, and environmental law (Llewellyn, 2003, p. 3). Qur'an and Sunna are the main sources of *shari'a.* Muslim environmentalists draw upon the Qur'an and Sunna to generate environmental principles from them, thereby creating ecological interpretations of Islam and a set of Islamic environmental ethics (Koehrsen, 2021). Koehsen, in his study "Muslims and Climate Change: How Islam, Muslim Organizations, and Religious Leaders Influence Climate Change Perceptions and Mitigation Activities," mentioned four Islamic environmental principles: tawhid, khalifa, M*izan,* and *maslahah* (2021).

Tawhid refers to the affirmation of God's oneness, which recognizes that God is the one and only Lord of every created being. Therefore, every single creature must be treated with reverence toward its Creator, and to serve the Lord of all beings, one must do the greatest good one can to His entire creation (Llewellyn, 2003, p. 3).

Khalifa refers to humans' role as vicegerents of God on earth (Koehrsen, 2021). The position of each human being as a *khalifa* on the earth has received considerable attention from Muslim writers; much of the discussion has misrepresented the concept, however, by overemphasizing the privilege and honour implied by the term (Llewellyn, 2003). According to some Hancock, *khalifa* is the single most important theme regarding Islam and ecology (2018, p. 56). Perhaps,

under the influence of European Humanism and in response to allegations that Islam gives too little value to human beings, Muslim writers have felt the need to prove that man has exalted status (Llewellyn, 2003). As enthusiasm for "development" and "progress" swept the poorer countries of the world, some reformist thinkers even interpreted the concept of *khalifa* as a mandate to exploit and develop the earth on behalf of God (Llewellyn, 2003). However, *khalifa* is not a privilege but a trust and a responsibility; therefore, caring about nature is a Muslim's duty to be a responsible steward of creation. Caring for nature is not just a way to protect our environment but also a way to serve God and fulfill our responsibilities as trustees of creation (Llewellyn, 2003).

The third principle is *maslahah*, the concept of public welfare, which pursues a sustainable achievement of good, welfare, advantages, and benefits for creatures (Abdelzaher et al., 2019, p. 628) and prioritizes public welfare over individual and private interests (Koehrsen, 2021). This principle echoes the sustainability definition. Additionally, this principle can be interpreted as the welfare of all creatures, which means animal rights, safeguarding, and posterity (Llewellyn, 2003).

The last principle, *mizan*, meaning balance, describes the universe as harmonious. Every detail of creation has been created to stand in perfect relationship with the other parts of creation (Koehrsen et al., 2019). This principle is known as the interconnectedness of ecosystems and is often used to describe the impact of climate change. It suggests that the delicate balance of the interconnected creation can be disrupted by the presence of greenhouse gases, leading to global warming and other environmental problems.

The substantive rulings of the *shari'a* that pertain to environmental law are found in the books of *fiqh*, mainly in the branch *of mu'āmalāt*, or transactions, under topics such as revival of vacant lands (*ihyā' al-mawāt*), protected areas (*himā*), the use of water for irrigation and livestock (*shirb*), land grants (*iqtā'*), leases (*ijārah*), maintenance (*nafaqah*), laws of hunting and slaughter (*sayd* and *dhabā'ih*), property (*milk* and *māl*), economic transactions (*buyū'*), reconciliation (*sulh*), endowments (*waqf*); and alms and taxes (*zakāh*, *sadaqah*, *'ushr*, and *kharāj*), which are discussed in both *mu'āmalāt* and ritual devotions (*'ibādāt*) (Llewellyn, 2003). According to Llewelyn, Islamic environmentalism can use legal instruments of *shari'a:* Al-Haramān*: The Two Inviolable Sanctuaries,* sacred territories surrounding Mecca and

Al-Madinah, *Harim, and Hima* are related to conservation and primarily exist as traditional and customary practices, and *waqf,* charitable endowments (Llewellyn, 2003).

Al Haraman are sacred territories surrounding Mecca and Al Madinah. According to the *shari'a,* these sanctuaries (haram) are sacred and must not be violated, as they provide a haven for human beings, wildlife, and native vegetation (Llewellyn, 2003). Harming or disrupting the wildlife within these sanctuaries is strictly prohibited. However, in practice, large urbanization processes are ongoing. Hunting and harming the nature of these two sacred places is still prohibited. *Sharia's* legal instruments seem to work against development; however, according to Islamic law, "Dire necessity makes the prohibited permissible."(Llewellyn, 2003)
So, the approach in these sacred places is dualistic. Indeed, there are now a number of sites in the world, including urban sites, that are held to be sacred or of high cultural value and set environmental standards approaching the strictness of those standards, which, in theory, apply to Mecca and Al-Madinah (Llewellyn, 2003). Therefore, all planning, design, and construction within the sacred precincts of Mecca and Al-Madinah would have to be carried out with extraordinary sensitivity and care. Millions of pilgrims visit two sites each year for *the Hajj and Umrah.* While performing religious pilgrimage, Muslims try to demonstrate high standards of environmental excellence as embodiments of harmony between humanity and nature and as expressions of human stewardship (*Khalifa*); they have great potential to spread environmental consciousness throughout the Muslim world (Llewellyn, 2003).

The second legal instrument is Islamic law, which designates various inviolable zones, called *harim*, within which developments are prohibited or restricted to prevent the impairment of utilities and natural resources (Llewellyn, 2003). *Harim* zones, or municipal lands within settlements, are the inviolable zones of water sources that have great potential for watershed conservation and management for the sustainable use of wetlands and the conservation of their biological diversity (Llewellyn, 2003). However, there is often inadequate management or excessive exploitation of *harim* zones, which are under the jurisdiction of local municipalities. Similarly, water sources may be completely overlooked in some cases. Therefore, Llewellyn argues that there is a need for cooperation between Muslim Jurists and scholars from different spheres like hydrology, socioeconomic, or biology, where scholars can provide research while Muslim Jurists will provide justification and spread rules among local communities (2003).

Third, legal instruments in Islamic law refer to all unowned wildlands protected from settlement, farming, normal grazing, wood cutting, and the like and reserved for purposes pertaining to the public good as *hima*, meaning a "protected area."(Llewellyn, 2003)
The pre-Islamic tradition of *hima* is characterized as privately owned, while Prophet Muhammad, upon him be peace and the blessing of God, transformed the meaning of *hima* and established only the way for the public welfare (Llewellyn, 2003). Traditions of *hima* have great flexibility. To be valid in Islamic law, according to most prominent Islamic jurists, a *himā* must meet four conditions, which they derived from the practices of the Prophet and the early caliphs (Llewellyn, 2003). It should:

1. be constituted by the legitimate Islamic governing authority:
2. be established for purposes pertaining to the public welfare.
3. not cause undue hardship to the local people.
4. realize greater actual benefits to society than detriments (2003).

Researchers have identified the *hima* as having many potential applications, such as rehabilitating rangeland, controlling nomadic grazing, and managing water catchments (Llewellyn, 2003). Many *himas* are located in areas with high species diversity, making them important for preserving biological diversity. They also serve as seed banks to rehabilitate surrounding rangelands. As the loss of species and ecosystems continues to threaten the earth's productivity, the Hima has become an important legal instrument for conservation in the *sharī'ah* (Llewellyn, 2003).

The last legal instrument that might be used in Islamic environmental law is *waqf.* Individual Muslims make it a charitable endowment (*waqf),* dedicated in perpetuity to the cause of God, to contribute to the public good. Historically, the role of charitable gifts has been enormous; the *waqf* has been the primary source of funding for mosques, schools, hospitals, and other public works in the Muslim world (Llewellyn, 2003). Charitable contributions are essential for conservation efforts in many countries, as governments. In reality, there is often inadequate management or excessive exploitation of harim zones, which are under the jurisdiction of local municipalities. Similarly, water sources may be completely overlooked in some cases.ts cannot bear the full costs, especially in poorer nations. Private donations allow people to support projects they believe are most beneficial. *Waqf,* a concept of holding assets and donating yields, can be introduced to fund forest protection and regeneration initiatives. It has unique

characteristics that make it suitable for developing forest preservation programs. *Waqf* lands cannot be sold, granted, or inherited, making them ideal for sustainable forest management. In Islam, waqf forests have been established in the past, with the first *waqf* being made by Umar ibn Khattab, the companion of the Prophet Muhammad (Ali & Kassim, 2020).

Alternatively, it might be used to fund such research and reintroduction, acquire land for conservation purposes, or restore and enhance habitats within or outside protected areas. New endowments should be encouraged within protected areas to complement the purposes of the *hima* (Llewellyn, 2003).

More legal instruments, sanctions, and policies within *shari'a* can be used in Islamic teachings and ethics regarding the environment. One of the main challenges in establishing the practice of Islamic environmental law is the disconnect between the conservation professions and Islamic law (Llewellyn, 2003). This disconnect has emerged due to the decreasing involvement of Islamic jurists, the *fuqaha*, in decision-making related to administration, policy, planning, management, and legislation (Llewellyn, 2003). Instead, these tasks are being taken over by individuals with secular training; as a result, the *fuqaha* have been relegated to roles such as professors, scholars, and writers, and in many Muslim countries, even the *shari'a* courts no longer have jurisdiction over environmental cases (Llewellyn, 2003). However, despite this, some jurists are still knowledgeable and concerned about environmental issues, and additionally, there are environmental specialists who are committed to implementing *shari'a* principles (Llewellyn, 2003).

4.2 Role of Religious Leaders in Environmental Advocacy (Islamic Declaration on Climate Change, Laudato si) 1400

The birth of Islamic environmentalism, known as Islamic environmentalism, happened in the late 1960s of the twentieth century. The starting point is the first series of lectures, "Unity of Universe," by Iranian-born Muslim philosopher Seyyed Hossein Nasr. Drawing on Sufism and the unity of the universe, Nasr stresses the connections between environmental and spiritual, moral degradation of the modern world (Nasr, 1968). In the 1980s, with the works of contemporary figures in Islamic environmentalism such as Mawil Izzi Dien, and Fazlun Khalid, a significant shift occurred as Muslims from various denominations began to embrace

environmentalism (Avis, 2021). This development fostered a sense of togetherness as they united to champion an environmental cause. The fact that many Muslim environmentalists had a diasporic background and focused on present-day issues instead of past sectarian conflicts played a pivotal role in facilitating this unity(Avis, 2021).

As mentioned in Chapter Two, one of the first steps toward implementing Islamic principles for conservation was done by Muslim organizations and leaders who have actively advocated for climate policies among governments through public campaigning activities and launching public statements. One such influential statement is the "Islamic Principles for the Conservation of the Natural Environment," which was compiled by scholars from Jeddah University in Saudi Arabia in 1983 (Kader, 1983). This document presented environmental policy based on Islamic principles and has been used as a basis for policy development in several Muslim countries, including Saudi Arabia and Iran (Kaminski, 2019; Yildirim, 2016). This statement is as follows:

"Protection, conservation, and development of the environment and natural resources is a mandatory religious duty to which every Muslim should be committed. This commitment emanates from the individual's responsibility before God to protect himself and his community. It is also a common social duty which rulers, administrative and municipal agencies, and organizations undertake in accordance with the responsibilities assigned to them. (...) The primary duty of the ruler and his assistants, whether they are administrative, municipal, or judicial authorities, is to do their best to realize the interests of individuals for the betterment of life and society as a whole. This also includes protection, conservation, and development of the environment and natural resources."(Kader, 1983, pp. 20-21)

This report highlights various factors that should be considered while developing future environmental policies, such as water and air pollution, preservation of plants and animals, noise reduction, regulation of insecticides and radioactive materials (Foltz, 2005). The report suggests implementing protected areas or *himas* and *harims* where development should be prohibited to preserve the environment (Foltz, 2005, p. 10) The establishment of protected areas can be helpful in reducing the negative impact of natural disasters such as sandstorms that are common in these regions.

During the late 1990s into 2000, several major environmental conferences were held in Saudi Arabia and Iran, in Jeddah and Tehran, respectively, by the initiative of Iranian President Mohammed Khatami, highlighting that pollution posed a serious threat to all of the regional countries—a threat even greater than war—and argued that this was one issue in which sectarian differences ought to be put aside and that all parties should be able to find common ground on (Kaminski, 2019).

From 2008 to 2010, 22 participants from Islamic non-governmental organizations, academic, Government, and Muslim environmental groups from 14 countries developed the Muslim Seven-Year Action Plan on Climate Change (M7YAP) as part of the initiative developed by the British Earth Mates Dialogue Center (EMDC) with the Kuwaiti Ministry of *Awqaf* and Islamic Affairs, and the Alliance of Religions and Conservation (Avis, 2021; Kaminski, 2019). According to the mission statement of the M7YAP, the long-term goal of the plan is to "Mobilize all the resources of the Islamic Umma to contribute to the ongoing global efforts dealing with Climate Change based on a 7 Year Environmental Conservation Action Plan that reflects Islamic Principals and Values" .
M7YAP were (Kaminski, 2019):

1. Establishing an institutional enabling framework
2. Developing the overall capacity to deal with climate change and environmental conservation
3. Developing and enhancing communication, outreach, and partnerships
4. Activating and reviving the implementation of previous initiatives, plans, and declarations

There are a number of nonprofit organizations that focus on promoting environmental awareness and sustainable development within Muslim communities worldwide. One of them, Islamic Relief Worldwide (IRW), is committed to offering aid and support to individuals in need worldwide, regardless of their race, religion, or nationality. Founded in 1984 in the United Kingdom, IRW operates in over 40 countries and responds to emergencies such as natural disasters, conflicts, and poverty (Worldwide, 2011). The organization focuses on providing emergency relief, sustainable development projects, and supporting communities to build resilience and self-reliance(Worldwide, 2011). Another one is the Islamic Foundation for Ecology and Environmental Science (IFEES). Founded in 1994 by Falzun Khalid, IFEES engages in research, advocacy, and educational initiatives to address environmental challenges

from an Islamic perspective (IFEES, 2024). The organization collaborates with religious scholars, scientists, policymakers, and grassroots organizations to integrate ecological principles into Islamic teachings and practices (IFEES, 2024). GreenFaith is a non-profit organization that encourages and mobilizes religious communities to address environmental challenges through collective action. Founded in 1992, GreenFaith works with diverse religious traditions, including Christianity, Judaism, Islam, Hinduism, Buddhism, and others, to promote environmental stewardship and sustainability (Faith, 1992). The organization offers educational programs, resources, and advocacy campaigns to empower religious leaders and communities to address climate change, protect ecosystems, and promote social justice (Faith, 1992).

In 2015, just a week before COP 21 in Paris, the International Islamic Climate Change Symposium, organized by collaborative work of Islamic Relief Worldwide, the Islamic Foundation for Ecology and Environmental Sciences (IFEES), and Green Faith, was held in Istanbul, bringing together leaders and scholars throughout the Muslim world (Kaminski, 2019, p. 180). The symposium resulted in the "Islamic Declaration on Global Climate Change," which unequivocally declared that climate change is real and that humans are primarily responsible for it. It also called on governments, faith leaders, businesses, organizations, and believers to take meaningful action, "calls" also include the "oil-producing states," requesting them to "lead the way in phasing out their greenhouse gas emissions as early as possible and no later than the middle of the century," at the upcoming COP 21 conference to address the issues of climate change and environmental sustainability (Avis, 2021; Kaminski, 2019, p. 180). The declaration recognizes that humans have played a significant role in damaging the environment by dominating nature. It stresses the urgency of taking action to combat the effects of climate change, especially for vulnerable communities. The document emphasizes the scientific discoveries related to the dangers and aftermaths of climate change. It covers various concerns, such as potential harm to the environment, human societies, diverse living beings, and the fundamental physical systems of the planet. The declaration is rooted in Islamic teachings and highlights the significance of being responsible stewards (*Khalifa*) of the Earth, respecting the sanctity of all living creatures, and acknowledging human accountability for their actions.

The Declaration was the initiative of a coalition of civil society organizations working on environmental education in Muslim societies, alongside The Islamic Scientific Educational and

Cultural Organisation (ISESCO), The Organization of the Islamic Conference, and the International Islamic Fiqh Academy based in Saudi Arabia (Avis, 2021). Ali notes that "what was notable about the declaration was its willingness to challenge the fossil fuel economy of the Middle East," which may create substantial pressure on countries of this region, as well as an impact on Muslim mitigation efforts "if the imams in mosques are committed to reminding the (…) rapidly increasing number of Muslims of their moral responsibilities as taught in the Qur'an and by their revered prophet" (2016, p. 174).

The Declaration highlights the importance of taking immediate action to address the issues of climate change and social justice. It emphasizes that it is not only the responsibility of institutions but also individuals to uphold ethical principles and work towards a sustainable future for all. By acknowledging the moral imperative for urgent action, the Islamic Declaration on Global Climate Change highlights the significance of environmental protection and social justice in today's world. However, as mentioned previously in Chapter Two, this Declaration received far less media attention than "Laudato Si," and its impact remains, so far, unclear (Hancock, 2018, p. 20).

The Islamic Foundation for Ecology and Environmental Sciences (IFEES) drafted a declaration on climate change that mirrors many of the encyclical's key messages and ends with a call to action for Muslims everywhere to play a role in tackling climate change, even calls on other faith and religious groups to join in the effort (Hoffman, 2015). However, the Pope has the ability to reach certain segments of the public who may not be receptive to the messaging on climate change from the three primary messengers, namely environmentalists, politicians, and scientists (Hoffman, 2015). The Pope is able to persuade and inspire and has the potential to reach out to the global community of 1.2 billion Roman Catholics; it seems that Catholics are quite responsive to his message. According to a survey by the Yale Project on Climate Communication, a solid majority of Catholics (70%) think that global warming is happening, and 48% think it is caused by humans, compared with only 57% and 35% of non-Catholic Christians, respectively (Hoffman, 2015).

The Pope's message is calling attention to the ongoing efforts of religious and environmental groups (such as Interfaith Power and Light, the Yale Forum on Religion and Ecology, the Catholic Climate Covenant, Green Faith, and others) and leaders in other denominations, notably Ecumenical Patriarch Bartholomew I of the Orthodox Church, nicknamed the "Green

Patriarch," who has been calling out the "sin" of environmental degradation for years (Hoffman, 2015). The call for environmental action is not limited to a single religious denomination. In fact, the message has resonated with representatives from various religious groups. For instance, more than 300 Jewish rabbis have signed a letter urging action to prevent further climate disruption and promote eco-social justice (Waskow, 2015). Similarly, the Dalai Lama has expressed his support for the Pope's encyclical and called for more efforts, including demonstrations, from Buddhists and all individuals to tackle climate change (Melino, 2015). He suggested that tackling climate change may be better led by a religious coalition than a political one, stating, "Countries think about their own national interest rather than global interests, and that needs to change because the environment is a global issue."(Hoffman, 2015; Melino, 2015)

In the case of the Islamic world, there is no single recognized leader due to the separation of Islam into numerous sects and juridical schools of the Islamic law that can push the environmental agenda, the Declaration on Climate Change, in the international arena. Additionally, the Declaration has a nonbinding character. Therefore, the practical implementation of the Declaration is not clear; however, it could be an inspiration for active civil Muslim society members who can push the agenda through legal instruments of *shari'a* on the local level. As an example, recently, the Indonesian Council of Ulema issued a significant religious decree, *fatwa*, which prohibits the illegal wildlife trade under Islamic law (Avis, 2021). This is the first time a fatwa has been issued against illegal wildlife trafficking. It resulted from a collaboration between the Alliance of Religions and Conservation and WWF Indonesia (Avis, 2021). The *fatwa* calls upon the country's 200 million Muslims to actively safeguard endangered species such as tigers, rhinos, elephants, and orangutans (Avis, 2021). Although the fatwa is not legally binding, however, it serves as a powerful deterrent in a country where 87% of the population is Muslim (Avis, 2021). However, these kinds of activities depend on how the state and society interact and what kind of ruling is in a particular state.

Even though Kaminski notes that conferences on the environment were held in both Sunni- and Shi'a-majority countries, which supports the point that environmental stewardship transcends sectarian boundaries (2019). In Islamic-majority countries, researchers have to pay attention to what kind of *sect* and *madhhab* country or society they belong to. In the case of Saudi Arabia, as it was described in Chapter Two, Shaykh Mohammad Ibn 'Abd al-Wahhab's

school, the eponymous founder of Wahhabism or Salafism as it is known today, is the only one from which the Saudi state recognizes and draws its religious discourse, and the religious establishment is based on Wahabism, and its leaders are chosen from among the sect's senior clerics (Alsaif, 2013, p. 377). The next subsection will describe the influence of Wahhabi Interpretation on Environmental Policies.

4.3 Influence of Wahhabi Interpretation on Environmental Policies 1300

The founding of Saudi Arabia as an independent state is closely tied to two families: the House of Saud, which is associated with the country's name as a dynasty, and the Wahhab family, whose ideology is closely linked to the state. The House of Saud represents the ruling elite, *umara*, while the Wahhabi family represents the religious establishment, *ulama*(Bayram, 2014*)*. Shaykh Mohammad Ibn 'Abd al-Wahhab was born in the town of al-Uyaynah in the Arabian province of Najd in 1702 in a prestigious family of Hanbali jurists and theologians(Bayram, 2014). Therefore, according to his teaching, they recognize only one Sunni legal school, Hanbali. He was affected by Ahmad Ibn al-Taymiyyah and Ibn Kayyim al-Cavziyyah, who are accepted as two of the most important people from the Hanbali school (Bayram, 2014). As a result of their ideas and views on religious life, he made a decision to focus on the Qur'an and Sunnah; Wahhabism emerged against innovations that were very popular amongst Muslim societies in the eighteenth century (Bayram, 2014). Generally, innovations are known as new things in terms of faith and practice, which was not seen in the age of the prophet Muhammad, upon peace and blessing; thus, Ibn Abd al-Wahhab and his successors declared war on innovations and disseminated their views from region to region in order to revive the authentic creed and deeds practiced by the Prophet Muhammad and his companions (salaf u salicin) (Bayram, 2014).

The Wahhabi *ulama* played a crucial role in the foundation and maintenance of each Saudi-Wahhabi state (Bayram, 2014). However, according to some scholars, the influence of Wahhabi *ulama* gradually declined in the recent period of the state; with modernization attempts, King Faysal finalized their influence on politics (Bayram, 2014), while others argue that the Saudi monarchy is best described as a 'theo-monarchy' shaped by religion and long-standing religio-cultural norms and based on an ongoing compromise between existing religious institutions and the monarchy (Al-Atawneh, 2009). This subsection will investigate

Wahhabism's interpretation of environmental policies through the lens of the Hanbali Islamic juridical school since the Wahhabi sect recognizes only it.

Ibn Hanbal, famous for having founded one of the four remaining official schools of law (*madhhab*: Hannafi, Maliki, Shafii, and Hanbali) in Islam, the Hanbali law school or Hanbalis, commonly affiliated with Islamic fundamentalism, which is the prevalent school in the Arabian Peninsula, "relied extensively on considerations of public interest or welfare, *maslaha*, and many rulings have been validated on this basis." (Kamali, 2008; Lobah, 2016) Also, the Hanbali Law School established water use law and ownership of water sources; furthermore, the Kingdom of Saudi Arabia has directed that its course of development be within the traditional framework of this particular Islamic school of law (Norvelle, 1980). The expertise of Muslim jurists in the allocation of water rights represents the distillation of experience that civilizations in the arid and semi-arid Middle East have gained over millennia in managing a scarce resource and in bringing its management within the ethical parameters of Islam (Llewellyn, 2003). This most vital resource, of which every living thing is made and upon which each depends, may serve as an analogical basis for allocating rights to other formerly abundant resources that are now becoming progressively more scarce (Llewellyn, 2003).

Hanbali Law School pays attention to water ownership, priority of use, principles and methods of water allocation, responsibility for maintenance of irrigation and drainage systems, the relationship between water supply and the reclamation of unused land, the Harim, principles of property use, and water quality as related to purity for ritual ablution (Norvelle, 1980). According to Hanbali Law School, water cannot be owned by individuals or groups of people in its natural state of occurrence, essentially, flowing water, whether it has been appropriate, which means putting containers or creating infrastructure around it and the first person to develop a water supply or put it to use has a senior right to it (Norvelle, 1980). When establishing a water source, one must provide an area around or alongside it, which is known as a Harim (Norvelle, 1980). In this usage, *a harim*, as previously said, is an inviolable place. As such, it is an undeveloped area that provides enough room for water to be raised from a well by traditional means-e.g., a rope, pulley, and bucket - and for animals accompanying the user to rest, stand or be watered (Norvelle, 1980).

Excessive consumption and impaired quality by pollution are prohibited; the person who creates the infrastructure to access the water cannot withhold the water from others if there is

a surplus to his own needs; these are basic water use law (Llewellyn, 2003). Uses of water are prioritized according to need and the amount of water consumed; the highest priority is given to the "right of thirst"; the second priority is cooking, washing, and similar domestic needs; the right to water livestock is next in priority; and finally, the most consumptive use is the irrigation of crops (Llewellyn, 2003). This prioritization among uses favors those whose needs are most acute; it also favors the least consumptive uses or has the least impact on the resource (Llewellyn, 2003).

When it comes to a fair share of water for irrigation, farmers receive water according to seniority of ownership and longevity of the farm's existence; this ensures that all farms receive sufficient water, even during times of drought, by allowing the upstream senior user to take only the amount of water needed for their crops and release any surplus to the next user downstream (Norvelle, 1980), which means that marginal farms may not receive enough water; however, this system ensures that there is sufficient water for some farms to flourish, with the sacrifice marginal ones (Llewellyn, 2003). It is more efficient than systems based on proportional allocation, which can result in a general failure of crops when water is scarce; in effect, this helps to discourage the overextension of agriculture by restricting it to the extent that is economically viable in accordance with the availability of water at any given time (Llewellyn, 2003).

"The sheer pragmatic logic and versatility of the Islamic water law suggests that…it could readily be expanded into an Islamic law for the conservation of renewable resources." (Llewellyn, 2003) According to Llewellyn, securing prior rights to water through the construction of irrigation facilities could readily be equated with a demonstration of responsibility in conserving and developing grazing and wildlife resources over time (2003). Accordingly, people who invest their capital and labor in the conservation and rehabilitation of the resource by way of wildlife conservation and habitat enhancement, range improvement, or agroforestry would earn senior rights of usufruct in return for their investment, and all the improvements that they have made would belong to them (Llewellyn, 2003). This means that by creating water use and ownership laws, Hanbali Law School and the Wahhabi sect are directly interested in public welfare (*maslaha)* and sustainability.

In summary, the chapter highlights that Islamic teachings and ethics can provide principles and legal instruments to effectively implement mitigation and adaptation actions to address the

challenges of climate change and its consequences. The chapter also observes overall climate actions taken by other religious leaders, who showed the potential for religion to contribute to global efforts in combating climate change and promoting sustainable environmental practices. Lastly, observed Wahhabi interpretations of environmental policies, which is helpful for the next chapter's analysis.

5. Religion and Governmental Response to Climate Change

5.1 Saudi Arabia's Climate Policies and Initiatives 1300

On the domestic level, as mentioned previously, Saudi Arabia was interested in the Islamic principle of conservation, which was the starting point in 1983 at Jeddah University. In Saudi Arabia's revised protected area system plan, six to seven traditional *himas* are proposed for recognition as community-conserved areas (Kilani et al., 2007). Among them are Hima Bani Sar and Hima Thumalah, Hima al-Fawqa', Hima al-Azahirah, Hima Al Humayd, Hima Quraysh, Jabal Ral (Kilani et al., 2007)

Jabal Aja biosphere reserve has been put forward as a protected area embodying the Hima concept; it has been recognized in the World Wide Fund for Nature WWF and the Alliance of Religions and Conservation (ARC) Sacred Gifts for a Living Planet program (Kilani et al., 2007), "Father" of this project is Ottoman Llewellyn. This 2200 sq. km. area is the largest mountain massif in the interior of the Arabian Peninsula. A relatively cool and moist Pleistocene refuge with ephemeral freshwater wetlands, it harbors relict plant and animal species that have disappeared from most parts of Arabia, and it constitutes a natural gene bank (Kilani et al., 2007). With over 500 species of plants and vertebrate animals, it represents the greatest concentration of biodiversity in the interior of the Arabian Peninsula. It is an Important Plant Area and an Important Bird Area, and with its spectacular scenery, it is well suited for environmental education, environmental recreation, and eco-tourism (Kilani et al., 2007). A consultative framework is envisaged whereby the main stakeholders from the public and private sectors, including owners of the palm groves and wells and the livestock grazing in them, as well as representatives of the local communities, will participate in the planning and management of the *hima* (Kilani et al., 2007).

Regarding the Saudi Green Initiative and Middle East Green Initiative, the country plans to achieve "net-zero" greenhouse emissions by 2060, plant 50 billion trees across the region in

the coming decades, and implement a circular carbon economy(SGI, 2024). However, at the same time, Saudi Aramco announced that it plans to increase extraction of the oil in coming years from 12 million barrels a day to 13 million barrels by 2027– a move scientists, energy experts, and activists say goes directly against what is needed to stave off the most catastrophic effects of climate change (Kennedy, 2021). This kind of vision when the country is still extracting oil while claiming that it will employ new technologies such as carbon capture systems or energy efficient usage of fugitive gases in the energy sector, aforestation of the region – essentially a carbon offsetting scheme. It is noteworthy that the aforestation project, as planned to plant 50 billion trees, was funded by the government; the roadmap is the outcome of a two-year in-depth feasibility study conducted by the Ministry of Environment, Water and Agriculture (MEWA) and the National Center for Vegetation Development and Combating Desertification (NCVC); the study was undertaken in collaboration with renowned multidisciplinary global and local experts (SGI, 2024). The logic of the aforestation plan as a part of climate change mitigation and adaptation through nature-based solutions is clear. However, the survival of these trees is doubtful under the gradually increased average temperature due to the overexploitation and extraction of fossil fuels as a primary energy source for water desalination and further irrigation for these trees in water-scarce regions such as the Arabian Peninsula is another point for discussion (DeNicola et al., 2015).

In Saudi Arabia, 70% of inhabitants largely depend on desalinated water for their consumption (Eyl-Mazzega & Cassignol, 2022). Saudi Arabia's desalination capacity is set to increase from 5.6 million cubic meters (m3) per day in 2022 to 8.5 million m3 per day in 2025, and it will have to cover more than 90% of the country's water consumption (Eyl-Mazzega & Cassignol, 2022). An increase in desalination capacity will boost electricity demand and associated greenhouse emissions if the electricity mix remains largely dominated by hydrocarbons; therefore, demand for gas and oil to produce this electricity would also increase (Eyl-Mazzega & Cassignol, 2022). There is still a positive point to the Al Khafji reverse osmosis plant in Saudi Arabia, which desalinates 60,000 m3 every day and is powered by photovoltaic panels (Eyl-Mazzega & Cassignol, 2022). Nonetheless, one of the challenges associated with desalination is handling the remaining brine after separating the salt particles from seawater. Often, this brine is released back into the sea, which can lead to higher salinity levels in coastal waters. which means it is a direct threat to seawater biodiversity and biomass. The intake pumps of these plants can also suck in sea life, such as jellyfish, plankton, and algae, along with other suspended solids, therefore there is a need to improve the desalination process to minimize its impact on the environment (DeNicola et al., 2015).

The non-combustion use of hydrocarbons has great potential in Saudi Arabia, where the shift to solar and wind-powered energy will be cheaper than if there were no petrochemical plants that could provide enough domestically produced components. Transportation expenses will be reduced in this scenario since Saudi Arabia has developed a good infrastructure through an energy-efficient tube system. By investing in non-combustion use and hybrid systems to increase the cost-effectiveness of fossil fuels, Saudi Arabia tries to prolong the life of fossil fuels by alternating the purpose of use. Notably, the Kingdom put its "net zero" target in 2060, while most countries opted to be "net zero" in 2050.

As previously discussed, Depledge described the tactics used by Saudi officials, mostly represented by the national petroleum ministry, on climate negotiations as showing skepticism toward climate science, blocking progress through negotiating techniques, and aligning with coal lobbies (2008). Morten Flisnes, in his detailed analysis of Saudi positioning, observed actions in the key years of negotiating and beginning implementation of the Paris Agreement (2012-2018) (Flisnes, 2019). In that time, he observed 45 acts of obstruction by Saudi Arabia, mostly blocking or delaying "progress on items they care less about in order to gain leverage on more important items ("parallel progress"), postponement and delay, blocking on procedure, repetition, and propagation." (Flisnes, 2019) These were in the open meetings reported on by the highly respected and neutral reporting service *Earth Negotiations Bulletin (ENB)*; including closed meetings and actions by coalitions in which the Saudi delegation participated would no doubt make this number far higher (Depledge et al., 2023).

Internationally, the Saudi delegation emphasizes efforts to implement Carbon capture and storage systems, which involve capturing the carbon after combustion and permanent underground storage. CCS actually *increases* fossil fuel input for the same energy output because capturing and compressing CO2 requires combusting additional fuel (Krane, 2020, p. 316). The current state of carbon capture technology is being promoted by the Saudis – technology that is still unproven in its effectiveness and extremely expensive to use for large-scale extraction (Kennedy, 2021). As mentioned before, Saudi Arabia has succeeded in curtailing wasteful natural gas flaring during the extraction of fossil fuels; however, with the increasing demand for energy due to increasing water demand, this success seems not permanent since it still releases CO2 into the atmosphere. Therefore, many fossil fuel

proponents acknowledge that “cleaning up” the sector itself would reduce pressure to curtail final consumption (Krane, 2020).

Saudi officials want more attention paid to GHGs, such as methane and nitrous oxides, which, although forming a smaller portion of overall emissions, carry much higher heat-trapping properties than CO2 (Krane, 2020). While Nitrous oxides are largely used in fertilizers in the agricultural sector, Saudi Arabia is taking a leading role in promoting the Global Methane Initiative to limit the runaway emissions of methane. Saudi Arabia sees the future in a synergy of fossil fuels and renewable energy and largely investing in research into research of low-emissions fossil fuel technology.

5.2 Role of Religious Institutions in Shaping Environmental Policies 1400

From previous chapters, it is understandable that religion is embedded into the Saudi governmental structure. As a part of education, starting from public and private schools (including international), students at all levels receive mandatory religious instruction based on Sunni Islam, according to the Hanbali School of Jurisprudence (Freedom, 2022). The Wahhabi sect has significantly influenced the worldviews of Saudi citizens by establishing a strong political and ideological doctrine that protects and justifies the monarchy.

During the Gulf War, when the Council of Senior Ulama issued a fatwa related to US troops that were located in Saudi Arabia and called the King an *Imam* (religious leader) who was protecting his land and citizens, giving the idea of how religious rhetoric was used in Saudi Arabia. If the King, as the head of the state, holds both religious and political power, can it be assumed that Saudi Arabia is perceived as a religious institution? If not, why? In analogy with King Charles III of the United Kingdom, who is head of the church and country, with one caveat that his monarchy is constitutional in the meantime, Saudi King has an absolute monarchy, Al-Atawneh called it “theo-monarchy.” However, in this comparison, another point to mention is King Charles III, one of the leaders of climate action, while King Salman's government tries to pause it. Probably, there is a difference in understanding of climate change issues. Western countries see climate change as a threat and look for solutions through different international mitigation and adaptation policies. Saudi Arabia sees these policies as a threat to national welfare and development.

Religion in Saudi Arabia is used by the monarchy to support its own regime. According to the 1992 Basic Law of Governance, Freedom of religion is not provided; it bans "the promotion of atheistic ideologies in any form," "any attempt to cast doubt on the fundamentals of Islam," publications that "contradict the provisions of Islamic law," and other acts, including non-Islamic public worship, public display of non-Islamic religious symbols, conversion by a Muslim to another religion, and proselytizing by a non-Muslim (Freedom, 2022). The highest in the hierarchy of religious institutions is the Council of Senior Ulama; members and the head of the Council, who is the Grand Mufti of Saudi Arabia, are assigned by the King. Religious leaders primarily focus on social matters. For example, in terms of jurisprudence, they have full independence since they rely on their knowledge of *shari'a*. However, In terms of impact on significant policies related to foreign affairs, economic development, fossil fuel extraction and pricing, wealth distribution, or political involvement, they have no or minimal effect (Al-Rawaf, 1980).

As previously discussed, the Hanbali Law School has developed a water use law. Saudi *ulama* can develop a universal law for the environment from this contextual law. Hanbali's interpretation of water law can serve as an example of how religious institutions stand in relation to environmental law, which is based on natural source management, treating water as a common good. This transition can extend from contextual water use law to a more universal approach, where the planet's natural resources are considered a common good, benefiting everyone. Similarly, with the climate. Since humans are taking prior rights for natural resources through the construction of facilities for extraction, this should be equated with the demonstration of their responsibility as *khalifa* to conserve and protect the environment for the common good. Even though environmental principles are embedded in the teachings and ethics of Hanbali Law School, there are certain reasons why Saudi *ulama is* not engaging with it.

5.3 Reasons for non-engagement of religion in climate politics in Saudi Arabia

There are numerous reasons why religion is not engaging in climate politics in Saudi Arabia. The first one is already mentioned in the previous subsection: Saudi *ulama* has no impact on foreign politics, economics, or wealth distribution. Their primary task is social matters and jurisprudence, where they have independence in decision-making.

The second reason is that religion supports the monarchy regime by issuing *fatwas* on social matters when citizens need reasoning for certain government decisions. Saudi ulama has to align with the governmental position in the international arena, not contradict it.

The third reason, described by Yildirim, is that environmental issues are considered "low politics" compared to more immediate concerns, such as poverty and development in developing nations, including Muslim-majority countries, which face challenges in addressing environmental issues due to limited resources and the prioritization of economic development (Yildirim, 2016). Saudi *Ulama* is concentrating on finding or giving an opinion for a solution to the matter that needs immediate action.

The fourth is that Islamic environmentalism principles and approaches are used in Islamic fundamentalist rhetoric, such as Al Qaeda, Hizbut Tahrir, and others. Therefore, Saudi *Ulama* does not engage with fundamentalist rhetoric, which is not allowed in the state by the Basic Law of Governance.

The fifth reason is that Saudi *Ulama* does not realize that Islam has a rich tradition of environmentalism. This can be explained by the government's strict control over the education of religious clerics. The Ministry of Islamic Affairs must approve clerics traveling abroad to proselytize and operate under the Ministry's supervision. The stated purpose of this regulation is to limit religious scholars' ability to travel or preach overseas and to prevent the actual or apparent interference by clerics in the domestic affairs of other states (Freedom, 2022). Therefore, their worldviews are limited by studying sacred texts and policies allowed by the government. As an example, initiatives that come from international nonprofit organizations, like the "Green Hajj" guide, which is authorized by the government; however, the engagement from local religious clerics is not clear. The overall implementation is doubtful due to the bureaucratic machine of the government.

Finally, the last reason lies in their notoriously selective reading of sacred texts, which leads back to the first reason: Saudi Ulama pays attention to texts dedicated to the social sphere.
All these reasons why Saudi *Ulama* does not engage in climate politics can also be explained by weak civil society, compared to Indonesia, due to the government's strict control. Additionally, Islamic universities currently lack a specific discipline focused on Islamic environmental law due to the absence of professors in this area. To address this gap, it is

essential to establish academic degree programs that can equip professionals with the necessary skills and knowledge to fill these positions. It is a complex work in a complex world.

6. Conclusion

The objectives of the thesis were to (a) explore the greening of religion thesis, emphasizing its relevance and impact in the contemporary world, (b) investigate the historical and contemporary roles of Islamic principles and teachings in shaping climate politics and environmental policies, (c) examine the extent to which religious leaders, institutions, and texts influence governmental decision-making processes related to climate change mitigation and adaptation strategies in Saudi Arabia. The case of Saudi Arabia was chosen due to the high vulnerability to climate change and the impact of religion on the daily life of Saudi citizens. The thesis was guided by the main research question: how does religion influence climate politics and policy formulation in the Kingdom of Saudi Arabia? A conceptual framework was established encompassing concepts from scientific articles, governmental documents, and background talks during COP28 to answer the research question and analyze the findings. Chapter Five provided an overview and analysis of Saudi Arabia's climate policies and initiatives and examined the country's efforts to address climate change through regulatory frameworks, technological innovations, and international collaborations. The second subsection investigated the role of religious institutions in shaping environmental policies, focusing on Saudi Arabia. In the case of religious institutions, they have financial power, as well as religious knowledge, to motivate humans to tackle climate change. However, Saudi Arabia still has skepticism about climate change and its consequences. Even though Saudi Arabia does not deny the existence of climate change, it is doubtful about its consequences and a need for immediate action. Religious institutions are embedded in the Saudi government and have an influence only on social matters and jurisprudence. Due to strict state control, a weak civil society does not have an agenda except for domestic nature conservation and afforestation projects controlled by the state. The third subsection explored the reasons for the limited engagement of religion in climate politics in Saudi Arabia where despite having useful principles, ethics, and legal instruments in accordance with Islamic law, Saudi Arabia is not interested in implementing Islamic environmental law since it is not economically beneficial. This master’s thesis tried to find how religion influences climate politics formulations in Saudi Arabia; however, it found many reasons why religious institutions do not engage with climate politics.

Climate change is a great challenge of our time, which can cause future wars, social injustice, increased poverty, hunger, extinction of biodiversity, and limit our ability to survive. Unless humanity will not reassess its approaches and make this challenge a high priority. There is a need to research how religious scholars, imams, and community leaders understand their perspectives on climate change, environmental degradation, and the role of religious institutions in addressing these issues in Saudi Arabia. There is also a need for research on research public opinion and awareness regarding climate change and environmental issues within Saudi society, including the influence of religious teachings and authorities on individual behaviors and attitudes towards sustainability.

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