المجلة الأردنية في القانون والعلوم السياسية

Climate Diplomacy from a Neoclassical Realist Perspective: The Jordanian Model

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Abstract

This study aims to model Jordan's climate diplomacy in light of neoclassical realism (NCR) theory as it uncovers how domestic and systemic factors shape Jordan's multilevel strategy, in addition to testing the hypothesis that Jordan's multilevel strategy combines local, institutional and national factors as part of its climate diplomacy. The data collected from various sources hypothesize that the multilevel climate response of small-income countries overlaps in a national and international way. The study found that Jordan's act of internationalism is a systematic, long-term strategy that can play at various stages, and all levels have welded with one another in a spider's web succession. Internationalism can be observed in Jordan's active participation in mitigation-related activities through the Paris Agreement and the Green Climate Fund. NCR has proven to be a sound method to analyze the Jordanian case. The unique determinants and solutions for the case provide new ways to think about coping with climate change. At the same time, the central finding highlights the significance of future research on the role of domestic politics and external environmental conditions in shaping behaviour and in the international negotiations process in general. It contributes to the relevance of NCR in climate diplomacy. It expands its usefulness from the interest-based explanations of countries' foreign policies in the international system to a broader scope of realism.

Keywords: climate change, neoclassical realism, climate diplomacy, mitigation strategies, Jordan

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المُلخّص

تهدف هذه الدراسة إلى نمذجة دبلوماسية المناخ الأردنية في ضوء النظرية الواقعية الكلاسيكية الجديدة حيث تكشف كيفية تشكل العوامل المحلية والنظامية استراتيجيتها متعددة المستويات، بالإضافة إلى اختبار الفرضية القائلة بأن استراتيجية الأردن متعددة المستويات تجمع بين العوامل المحلية والمؤسساتية والوطنية كجزء من دبلوماسيتها المناخية. وتم جمع البيانات من مصادر مختلفة للافتراض بأن الاستجابة المناخية متعددة المستويات للبلدان صغيرة الدخل تتداخل بطريقة وطنية ودولية. وتوصلت الدراسة إلى أن أممية الأردن هي استراتيجية منهجية طويلة الأمد يمكن أن تُلعب على مختلف المراحل، وقد التحمت جميع المستويات مع بعضها بما يشبه شبكة العنكبوت. ويمكن ملاحظة النزعة الدولية في مشاركة الأردن الفاعلة في الأنشطة المتعلقة بالتخفيف من آثار تغير المناخ من خلال اتفاقية باريس ومن خلال صندوق المناخ الأخضر. وقد أثبتت النظرية الواقعية الكلاسيكية الجديدة أنها طريقة سليمة لتحليل الحالة الأردنية. توفر المحددات والحلول الفريدة لهذه الحالة طرقًا جديدة للتفكير في التعامل مع تغير المناخ. وفي الوقت نفسه، تسلط النتيجة المركزية الضوء على أهمية البحث المستقبلي حول دور السياسة الداخلية والظروف البيئية الخارجية في تشكيل السلوك وفي عملية المفاوضات الدولية بشكل عام. تساهم الدراسة في أهمية النظرية الواقعية الكلاسيكية الجديدة في دبلوماسية المناخ، وتوسع فائدتها، من التفسيرات القائمة على المصالح للسياسات الخارجية للدول في النظام الدولي إلى نطاق أوسع من الواقعية.

الكلمات الدالّة: تغير المناخ، الواقعية الكلاسيكية الجديدة، دبلوماسية المناخ، استراتيجيات التخفيف، الأردن

1. Introduction and Context

On an international level, climate change is regarded as a key problem affecting world politics (Sosa-Nunez and Atkins, 2016, p. 4). It is recognized as a highly influential factor in the formation of commitments of great powers (e.g., the United States and China) and strongly influences contemporary geopolitics (Karatayev et al., 2021, p. 2). This problem is hugely significant and has domestic and international consequences for individuals and businesses (Heffron, 2015, p. 2).

Several studies report that the recent faster increase in GHGs (mainly CO2) is primarily caused by industrial civilization activity, generating more GHGs and accelerating global heating (Dietz et al., 2020). Accordingly, by 2017, the Earth's temperature had increased by around 1°C compared with the preindustrial era due to the continuous increase in GHG emissions (Dietz et al., 2020, p. 136). Factors contributing to high GHG emissions include all levels of society: macro, meso and micro. They must be dealt with regarding international emissions.

Unless the emission rate is drastically reduced due to a global temperature rise of possibly 2°C, earthly disasters such as droughts, the melting of glaciers and ice-caps, floods, water shortages and an increase in inter-state conflicts over dwindling resources may become a reality (Heffron, 2015, p. 2). From this, we can extrapolate that an unchecked situation could put humanity at risk. In light of this, the factors mentioned above need to be addressed, and collective actions must be taken to prevent the adverse effects of climate change in all countries.

Governments worldwide have made significant efforts to formulate policies and regulations to mitigate climate change, but their success has been limited. As a result, many have adopted a more reactive approach, known as climate diplomacy, which seeks to interlink climate change with foreign policy objectives. The primary goal of climate diplomacy is to foster discussions on national interests while promoting international cooperation on climate change (Jallow & Craft, 2014, p. 1). However, addressing climate change at the international level faces its most significant challenge in the neoclassical realist assumption of global anarchy (Mencütek et al., 2020, p. 107). It encourages countries to focus on internal capabilities rather than external solutions, as with climate change.

However, the complexity of modern international politics and the anarchy of the global system form a drag on the process, suggesting that even the most intensive forays into climate diplomacy cannot smooth away the obstacles or provide otherwise coherent solutions to climate change. Implementation of more substantive global schemes of climate change action requires nimble statesmanship, a heightened commitment to cooperative functioning, and a turn away from realist perspectives.

Climate change adaptation has become a crucial question in the international dialogue as it is gradually affecting more and more communities worldwide. While efforts to counteract climate change by cutting emissions growth continue, it has equally become vital to comprehend and respond to identified climate change impacts. This paper intends to contribute a particular perception of how a small nation responds to the multiple effects of climate change in policy and action.

Moving beyond previous climate discourse dominated by the message of emissions reduction, this study acknowledges advances made but also emphasizes remaining deficits, particularly the struggle to adapt to climate effects. This study also breaks new ground, refocusing the

narrative on what countries are doing on the ground towards adapting to the social, economic and environmental impacts of climate change.

In this article, a neoclassical realist perspective is deployed as the analytical tool through which climate diplomacy in Jordan is studied specifically to establish that neoclassical realism is a viable approach towards achieving climate policy. The study also delves into climate security risks and the influence of neoclassical realist views in the climate diplomacy debate. The study carefully examines Jordan's climate diplomacy methods while considering neoclassical realism.

The research questions aim to understand how Jordan's rational decision-making processes at both domestic and international levels shape its navigation and response to climate change challenges. The inquiry delves into the insights provided by a neoclassical realist perspective regarding Jordan's climate diplomacy efforts, securitization of climate change, and the effectiveness of policies across different levels.

The hypothesis posits that neoclassical realism theory suggests Jordan engages in a rational cost-benefit analysis, considering domestic and international factors, to respond to climate change adaptively. Jordan's climate diplomacy is expected to reflect strategic considerations involving material incentives and constraints. Additionally, it is anticipated that Jordan perceives climate change as a national security threat. The within-case analysis will trace how Jordan implements flexible and effective climate mitigation policies at micro, meso, and macro levels as rational adaptations despite encountering obstacles. The neoclassical realist perspective will offer insights into Jordan's strategic negotiations of domestic and international dynamics in addressing the challenges posed by climate change.

The argument in the paper was persuasive in showing that the study of climate change offers a fundamental context for fostering productive debates about theories of international relations and climate change studies. It emphasized how crucial it is for the general public, academics, and policymakers to comprehend how domestic and foreign policies influence efforts to mitigate climate change. Additionally, this study built a strong foundation for future international relations studies on climate diplomacy from numerous angles. By examining how small states change their foreign policy in response to global climate challenges, political scientists can anticipate future trends while providing important information about the realities of addressing global climate change.

The methodology of the study was qualitative research. It followed a single-case study design complemented by within-case process tracing that utilized the most up-to-date data on Jordan's climate-change policies. Process tracing analysis, which allows the examination of the internal and external factors impacting Jordan's climate-change policies, is the most suitable method because it can better capture the dynamic nature of the case through in-depth strategic scrutiny that provides intricate descriptions of the process. Process tracing provides reasonable confidence in interpreting within-case causal mechanisms leading to resultant case conjectures or constructing a solid case, ensuring the validity of the proposed mechanisms. It also provides procedural validity, meaning that the truth of the case grows with more serious and detailed analyses. Within-case process tracing, in this study, consisted of comprehensively mapping evidence using theory-laden hypotheses. In a nutshell, this paper utilizes process tracing as a substantive method, which examines the most up-to-date data explaining the latest move in climate diplomacy and Jordanian foreign policy through domestic politics in a neoclassical realist approach. The case of Jordan illustrates the transformation of its policy despite facing some barriers or hindrances, making the case more suitable for testing the assumptions of neoclassical realism theory.

This data was collected online through searches on Google Scholar and various other websites and official materials on which empirical data could be found. Relevant articles from peer-reviewed journals and book reviews were selected based on titles, abstracts, and full texts, focusing on publications within the past ten years. Government agency websites, worldwide and regional networks, and various Jordanian policies served as additional resources for analysis. The selected articles were systematically reviewed based on the research questions and study variables.

2. Climate Change Insecurity: Challenges and Prospects for Global Cooperation

Climate change has become a pressing security concern in national and international politics. Various international bodies, including the United Nations Security Council and the UN General Assembly, have discussed climate change and its implications for regional and global security since 2007 (McDonald, 2019, p. 153). Policymakers have taken significant steps in developing policies and agreements to address the far-reaching effects of climate change on the global ecosystem. However, despite approximately 70 per cent of nations recognizing climate change as a security concern, stakeholders have yet to agree on its precise implications for international security. Nevertheless, the increasing securitization of climate change elevates its significance as a global economic and security concern.

Climate change has been a prominent issue on the international agenda since the 1970s, prompting the establishment of the UNEP (United Nations Environmental Programme) in 1972 and the signing of the UNFCCC (United Nations Framework Convention on Climate Change) in Rio de Janeiro in 1992. Both efforts had the intention of addressing the effects of climate change (Heffron, 2015, p. 2). Unfortunately, the effectiveness of these international bodies in achieving their mandates has faced challenges because of intensified emissions of (GHGs), primarily CO2, in the atmosphere caused by increased human activities, leading to accelerated global warming (Dietz et al., 2020, p. 136). The factors contributing to high GHG emissions span the macro- to meso- to micro-levels of society, highlighting the interconnectedness between the causes of climate change, its consequences, and the solutions for mitigating it required in terms of national micro-, meso-, and macro-level activities.

At the micro-level, addressing climate change involves focusing on individual decisions and interactions. Individuals can significantly influence climate change by choosing to drive cars that burn gasoline or use other sources of energy, engaging in political activities to drive policy changes, or participating in activism against harmful developments that increase GHG emissions (Dietz et al., 2020, p. 141). The success of these individual actions depends on a country's internal structure and its support for public engagement in responding to external threats like climate change.

On a national scale, a country's foreign policy is shaped by its material power (Rose, 1998, p. 146). Nations with abundant resources, such as natural oil and valuable minerals, often wield influence over international policies than nations with fewer resources. This disparity in resource availability can lead to varying levels of GHG emissions and challenges in reaching a global consensus on climate change mitigation.

For instance, a nation heavily reliant on fossil fuels may prioritize promoting fossil fuels over investing in renewable energy sources, thus contributing to climate change as a global security

threat. According to Zhenmin and Espinosa (2019, p. 495), addressing climate change at the domestic level becomes essential to develop more effective and context-specific policies to respond to its adverse effects and work towards achieving a more sustainable and secure future.

The analysis highlighted that climate change poses a severe threat to life and that the lack of legitimate power to implement climate policies at the international level presents a significant challenge. The UNFCCC, adopted in 1992, has been hindered by obstacles in the law-making processes of international bodies and influenced by non-state actors in efforts to shape climate change policies (Boyle et al., 2018, p. 4). The capacity to effectively implement policies is crucial for international bodies like the UNFCCC. However, certain countries engage in activities that hinder cooperation in resolving climate change issues. Because nations' actions cause climate change, it has contributed to conflicts and the trade in illicit resources between countries (Nevitt, 2020, p. 544; McDonald, 2018, pp. 167–169). Moreover, climate change–induced infectious diseases harm human and animal species (Semenza & Paz, 2021, p. 2). These factors collectively contribute to the global threat of climate change.

When countries distrust one another, international cooperation becomes difficult. From the neoclassical realist perspective, a country accused of environmental damage and resource depletion may face consequences that impact its involvement in climate diplomacy at the international level, ultimately influencing its foreign policy decisions. Nations' mutual suspicion and differing interests can impede effective global action on climate change, highlighting the need for more substantial efforts to build trust and promote cooperation in addressing this urgent global challenge.

3. Climate Diplomacy in an Anarchic World: A Neoclassical Realist Framework

The neoclassical realism theory is grounded in three main assumptions that govern a nation's existence in the international system. Firstly, it asserts that sovereign states are the primary actors in the global system, granting them autonomy and legitimacy to make decisions in response to external threats within their boundaries (Heffron, 2015, p. 3). Secondly, the theory recognizes the international system as anarchic, meaning nations interact without a world government to control their sovereignty. Although international organizations like the UN and the World Trade Organization establish rules, they lack the authority and military capability to enforce policies, resulting in a lack of emergency assistance for external invasions (Heffron, 2015, p. 3). Thirdly, according to neoclassical realism, every state in anarchic systems strives for military dominance to preserve its existence, which fuels ongoing security competition among countries as they react to external threats (Heffron, 2015, p. 3).

The worldwide phenomenon of climate change has significantly impacted international relations (Sosa-Nunez & Atkins, 2016, p. 4). It affects many facets of the global system, including how people live and countries run. Due to its wide-ranging effects, climate change has become a top priority for citizens, domestic enterprises, and state politicians (Heffron, 2015, p. 2). Due to its emphasis on internal or state-level issues rather than external considerations, neoclassical realism has replaced traditional neorealism.

According to neoclassical realists, nations respond to threats based on their foreign and security policies, considering internal structures such as state-society relations, national political regimes, leadership perceptions, and cultures (Ripsman, 2017, p. 1). These factors influence a nation's climate diplomacy, shaping international discussions and cooperation.

Developed countries and trade blocs have effectively exercised climate diplomacy to shape global discussions and achieve consistent results. However, less developed nations may not

actively engage in climate diplomacy due to a lack of influence in discussions and a perceived insufficient capacity to address climate change domestically (Jallow & Craft, 2014, p. 2). Therefore, countries seeking to participate in climate diplomacy should work on developing adequate material influence before engaging in discussions.

Neoclassical realism emphasizes a country's internal structures as they determine its capability to make decisions in response to climate change challenges (Heffron, 2015, p. 6). Unlike theories promoting international cooperation to combat climate change, neoclassical realism encourages countries to focus on relative gains on the international stage and build internal resilience and resources to respond to climate change effects domestically (Purdon, 2017, p. 305).

While neoclassical realism aligns with neorealism in recognizing the importance of a country's position in the international structure, it deviates by emphasizing individual foreign policy behavior and its integration with international policy (Omar, 2013, p. 2). This approach allows low-income countries to choose alternative climate change mitigation approaches based on their people's livelihoods, making domestic methods central to their foreign policies.

Critics argue that neoclassical realism has led countries to prioritize their national interests and policies over supporting international policies, resulting in limited contributions to internationally established organizations addressing climate change (Nordhaus, 2019, p. 2006). Neoclassical realism's emphasis on short-term gains may lead some countries to commit to short-term mitigation programs for immediate benefits, driven by leaders aiming to leave a legacy (Heffron, 2015, p. 12).

Furthermore, the relative gains perspective has played a significant role in climate change regime failure. Certain countries gain more from international policies than others, leading to an unequal distribution of resources and GHG emissions reductions (Orgland, 2020, p.23). Neoclassical realism's alignment with immediate gains may prompt some countries to prioritize short-term solutions over long-term benefits, influenced by leaders seeking quick results (Heffron, 2015, p. 12).

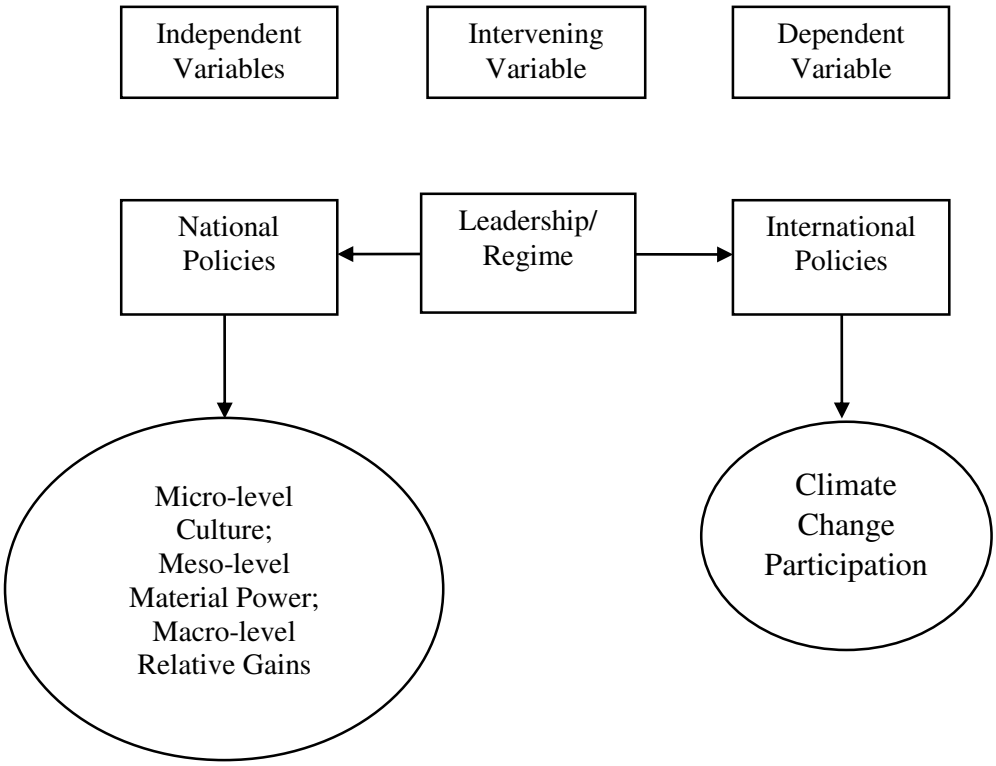

Figure 1: Neoreal Nexus: Climate Diplomacy Dynamics

The study proposes a climate diplomacy framework based on neoclassical realism. It consists of three independent variables and one dependent variable, with leadership as the intervening variable, as can be seen in Figure 1.

Independent Variables:

A) Culture: Micro-level variable: Culture impacts the domestic response of a particular country to climate change. Culture operates within the home and national environments, influencing the thinking, attitudes, values, norms, and behaviours that affect the country's attitudes towards climate-change challenges. Identity, psychological variables, background, and social dimensions are decisive in understanding the public's view on climate change (Arıkan & Günay, 2021, p. 159). The variable was established by analysing individual interactions, dynamics, and decisions towards climate change.

B) Material Power: At the meso-level, material power and industrial development are additional causal variables that explain GHG emissions and climate change impacts. More resourceful countries with greater economic power may exhibit more carbon-heavy footprints and, consequently, foreign policies towards climate change mitigation. This variable is measured within sectoral institutions such as water management and agriculture.

C) Relative Gains: At the macro level, a country's perception of relative gains can heavily influence its approach to climate change policymaking and action. A country weighs the costs and benefits of reducing greenhouse gas emissions relative to other countries. It uses the analysis to decide what – if any – consistent contribution it will make to global climate change

policy. This independent variable was analyzed by analysing strategic priorities articulated internationally and international partnership agreements signed.

Dependent Variable:

Climate Change Participation: To rate a country on how proactively it participated in global climate change conversations and activities, this variable allowed me to include a sign of their willingness to cooperate with other countries in combating climate change. Climate Change Participation measured variables that can objectively be used to describe a nation's climate change participation activities – such as percentage emissions reductions, percentage of energy generated by renewable sources, the percentage of global climate funding contributed, the number of international treaties adopted, etc.

Intervening Variable:

Leadership or regime: The leadership or regime affects all three exogenous (independent) variables (culture, material power, relative gains). The leadership's preferences, values, and processes affect how a country engages in climate diplomacy and dictates its priorities in climate action.

This model presents the culture, material power and perceptions of relative gains as independent variables that affect the type of response of a country to the issue of climate change and the country's conduct of climate diplomacy; the leadership or regime of a country is an intervening variable that affects the independent variables and explains/accounts for the dependent variable, which is the type of response of the country to the issue of climate change and its conduct of climate diplomacy. The intervening variable denotes how much the leadership and regime influence the followers.

4. Jordan's Multilevel Climate Response: Findings and Discussion

To address climate change in Jordan, it has been studied at the micro-, meso-, and macro-levels to explore how the internal anatomy of a state influences its foreign and domestic policies. Data analysis has been used to underline how Jordan has channelled its climate diplomacy.

One of Jordan's most significant climate-related challenges is low rainfall: most areas of its territory receive less than 50mm of rainfall per year (The National Climate Change Adaptation Plan of Jordan, 2021, p. 10). Because of a lack of resources, many of these difficulties 'took the form of more frequent and intense storms, flash floods and higher heat waves, which are all a result of climate change.' Jordan was not immune: the effects included devastation for its agriculture, loss of its plant and animal biodiversity, and its society (The National Climate Change Adaptation Plan of Jordan, 2021, p. 10). It emphasized the priority of adaptation to successfully overcome the effects of climate change.

Steps for adaptation (in the context of climate change and its consequences) include ecological and socio-economic changes adjusted to reduce environmental impacts and increase society's adaptive capacity to such changes (The National Climate Change Adaptation Plan of Jordan, 2021, p. 10). However, the first task, not the last, would seem to indicate a strategy to either evade or treat a viral pathogen.

This includes adapting policies, practices, and organizational structures so the damaging effects of climate change can be reduced in the nation. If the particular threats of climate change to Jordan can be identified and appropriate adaptation measures devised, then Jordan is better placed to deal with the impacts of climate change and how they will affect the country's environment, society, and economy.

Nationally, Meyer (2019) examines the role of elites in catalyzing action on climate change through the lens of gubernatorial elections, finding that policy elite (meaning government and society elites) opinions had a causal effect on their constituents' attitudes – otherwise said, climate responses such as climate policy experience a gravitational pull towards elite leaders' angle (Meyer, 2019, p. 786). Elite leaders change the direction of their followers on climate change policies. Still, they were pulled by the people to more accurately capture constituent interests around climate change, which ultimately led to climate legislation in the country.

As is the case elsewhere, both domestic and foreign policies in Jordan are thus highly dependent on elite leaders' political goodwill to carry out national policies. They are actors, negotiators, global capitalists, and legislators, among other things, as asserted by neoclassical realism. Policies are indeed dependent on leadership's power.

Together, Meyer's findings highlighted the special role of elite leaders in Jordan's responses to climate change. It showed their continued ability to tilt policy preferences both domestically and internationally. It also demonstrated how their power to press beyond boundaries and link Jordan with global actors makes them central actors in the country's climate diplomacy. Finally, it underlined how they play to the fundamental tenets of neoclassical realism, emphasizing leadership and power as causal dynamics central to the state's responses to global shocks like climate change.

In the international arena, the Paris Agreement on Climate Change, formulated in 2015, called on its member countries to strive to increase their ability to adapt to the adverse impacts of climate change and minimize and address their vulnerability in a manner that does not threaten food production and enables 'sustainable development. A study by EcoPeace Middle East (2019, p. 20) on the impact of climate change on water and national security in Jordan, Israel and Palestine showed the contribution of the Jordanian Ministry of Environment to the coordination of the national climate change governance and the international climate negotiations. To translate the international commitments of the UNFCCC and the Kyoto Protocol into local actions, the Jordan Ministry of Environment has established the 'Climate Change Directorate.

Even though GHG emissions in Jordan are low in absolute terms, the nation's growing industrial sector and economic developments are expected to increase GHG emissions. The assumption of neoclassical realism acknowledges a nation's sovereignty, providing Jordan with the sovereign power to make national policies that promote economic development even if they disregard reduced GHG emissions. Jordan may devise mechanisms to sustain low emissions while promoting faster economic growth.

However, by ratifying the Paris Agreement, Jordan committed to minimizing GHG emissions by 14 per cent by 2030, with the Kingdom contributing to 1.5 per cent and the remaining 12.5 per cent dependent on international support received (EcoPeace et al., 2019, p. 19). In 2013, Jordan established a National Policy on Climate Change to achieve a proactive climate-resilient, low-carbon but growing Jordanian economy with resilient and healthy communities and sustainable water and agricultural resources (Al Zoubi, 2015, p. 15). The Jordan Climate Change Policy has stipulated several climate change governance practices, structures, and

policies to mitigate climate change effects in the country, recognizing that climate change mitigation and adaptation affect cross-boundary sectors, businesses, and individuals.

Therefore, tackling the effects of climate change in Jordan was approached starting from the micro-level units, such as individual activities, businesses, or sectors, and then moving to the national level before international considerations, as is the perspective advocated by neoclassical realism. This approach acknowledged the significance of national-level decision-making and the nation's pursuit of economic development while recognizing the commitment to global climate change agreements.

4.2 Micro-Level Climate Choices: Individual Actions and Renewable Energy

Individual interactions, dynamics, and decisions are crucial in addressing climate change (Dietz et al., 2020, p. 141). The analysis showed that Jordan has been leveraging renewable energies to reduce its high consumption of fossil fuels. At the individual level, Jordanian citizens make daily choices regarding energy use, influenced by the culture's messaging and leadership regarding sustainable practices.

Jordan also imports 94 per cent of its energy since it is not self-contained and does not generate its own (Abu-Rumman et al., 2020, pp. 1-2). People can use either the energy produced by fossil fuels or more sustainable sources such as wind and solar power. As a result, fossil fuels are not the only alternative in Jordan to generate energy, which is now slowly being replaced by renewable energy sources such as wind and solar power (Al Zoubi, 2010, p. 46). Individuals play an active role in reducing carbon emissions caused by fossil fuel consumption by opting for energy sources that are sourced through renewables to heat and light the home.

This move toward generating renewable energy in Jordan reflects growing foreign policy and climate goals of developing domestic capacity to mitigate climate change – precisely what the neoclassical realist perspective would suggest. As Jordan builds domestic climate change mitigation capacity, it also improves its ability abroad to drive and promote renewable energy uses at home. Undoubtedly, doing so serves some of its foreign policy goals on climate change.

In promoting sustainability at home and investing in renewable-energy infrastructure abroad, Jordan's foreign policy priorities send a message to others in the Middle East and beyond that climate change matters. In other words, neoclassical realism can explain how domestic pull factors can matter as much as traditional push factors in shaping states' foreign policy choices on global climate change.

Indeed, Jordan's domestic policy on producing and distributing electricity to households smartly has been regarded as an effective way to mitigate climate change impacts internationally. Electricity production through rooftop photovoltaic (PV) systems was one case that Monna et al. (2022) examined. PV systems installed on a single house have been reported to produce between three and eight times the estimated current and future electricity consumption of a household, and so households benefit from savings in imports of fossil fuels (Monna et al., 2022, pp. 8–10).

In Jordan, residential buildings are major energy consumers, consuming around 43 per cent of the country's energy, significantly higher than the global average of 16 to 50 per cent. As a result, these buildings contribute considerably to Jordan's GHG emissions. To address this issue and promote sustainable energy practices, the country has adopted a national policy of investing

in photovoltaic energy, which has proven beneficial. This investment helps meet the urban energy demand and works towards greater energy sustainability.

From a neoclassical realist perspective, we understand that the international arena operates anarchically and poses challenges for countries seeking international assistance to achieve their national objectives. Jordan, for example, is committed to reducing its GHG emissions by 12.5 per cent, but the remaining reduction relies on international support (EcoPeace et al., 2019, p. 19). However, international bodies will only partially fund the country's mitigation goals on climate change. In response, the government is prioritizing domestic policies, including investment in photovoltaic systems for individual homes, to decrease the need for imports and promote greater energy independence.

Jordan's strategy has received praise in the academic literature on energy policy, as it demonstrates Jordan's commitment to climate change mitigation and acquiring inner resilience for sustainable development, along with the kingdom's forward-looking approach to tackling the detrimental effects of global warming. By investing in renewables such as photovoltaic systems, Jordan reduced its high dependence on energy imported in the form of fossil fuels. It managed to make remarkable progress in cutting back on GHG emissions with or without international support (Salah, Shalby & Basim Ismail, 2023). Jordan's approach to climate change reveals the essential role of domestic agencies and domestic capabilities in shaping state policies (and responses) to international issues such as climate change. This view is consistent with the neoclassical realist approach.

Abu-Rumman et al.'s (2020, p. 1) research unveiled the potential of Jordanian renewable energy from an economic perspective and identified it as a significant investment opportunity with a potential return of up to $20 billion for energy efficiency improvement. Jordan will invest and develop 2,000 MW in wind and solar energy. One can see Jordan's investments in renewable energy resources and energy efficiency as many others do: as a result of strong institutions, proactivity, significant commitments, vision, and a clear understanding that its climate-change policy matches its foreign policy goals, which proved to be the catalysts for international investments. There is no other explanation. Investing in energy renewables and efficiency resources demonstrates Jordan's proactive response to climate change.

Lastly and more importantly, individual and local decisions in Jordan, especially regarding the agricultural sector, substantially impact GHG emissions, including climate change. As temperatures rise, heat waves increase, rainfall patterns change, soil fertility is affected, and rain-fed agriculture becomes the most climate change-susceptible sector in Jordan. (The National Climate Change Adaptation Plan of Jordan, 2021, p. 23; Al-Bakri et al., 2011, p. 126) The susceptibility of rain-fed agriculture to climate fluctuations and GHG emissions lies in using rainfall as the source of crop productivity.

Jordan's Climate Change Policy encourages people to cultivate irrigated crops rather than rely on rain-fed practices. Low-level family farming also resonates with the literature on neoclassical realism, which highlights how a country's internal structure can affect its responses to external threats such as climate change.

Most importantly, Jordan is also investing in the internal capacities and mindset shifts (i.e., to green agriculture based on irrigation) that can help reduce GHG emissions in the agricultural sector and improve its climate change resilience. In addition, farming a variety of crops helps with better land use and fertility, as some crops are more nutrient-rich, enhancing soil. As noted by the National Climate Change Adaptation Plan of Jordan (2021, p. 22), this is an internal

undertaking that serves 'climate change mitigation' and resonates with the neoclassical realist view of internal domestic actions making a difference in foreign policies.

4.3 Meso-scale Initiatives: Institutions, Corporations, and Climate Mitigation

At the meso-level of analysis, the interactions between different groups, institutions and organizations influence climate change's impacts (Dietz et al 2020, p. 139). Between the macro- and micro-levels of analysis, it was about engaging with corporate behavior, the role of capital in climate change and society, and how climate change politics in different societal sectors shape climate change politics, governance, policies and practices.

Therefore, the final step is to disaggregate meso-level emissions and calculate the differences in emissions between firms or industries. Generally, countries with industrial development or more relative material footprints will also have an advantage regarding GHG emissions. As a rule of thumb, large businesses tend to emit more GHG emissions than startups or service-based companies.

Some countries (e.g., the United States) have taken a proactive approach to address the problem of high GHG emissions from big businesses through programs such as the Carbon Disclosure Project, which require big businesses to publicly report their GHG emissions as part of their responsible business practice (Dietz et al., 2020, p. 139). These initiatives enable businesses and industries to rank their attempts to mitigate GHG emissions contributing to climate change and improve transparency. Measures that enhance accountability are important in climate-change policies since they emphasize corporate behavior, and, in turn, advocate transparency in reporting GHG emissions. These initiatives raise awareness and foster responsibility by motivating such businesses to evaluate their ecological profile and attempt to reduce their carbon footprint. Ultimately, these meso-level interactions and initiatives contribute to broader climate change mitigation efforts at the national and international levels.

In Jordan, climate change governance is focused on institutional processes and structures, particularly within the Aqaba Special Economic Zone Authority for the coastal region. Decision-making and planning at the individual business level and across multiple sectors are influenced by neoclassical realism theory, leading to policies and practices that aim to reduce GHG emissions by businesses and industries (Al Zoubi, 2015, p. 13).

One sector facing significant challenges due to climate change in Jordan is the water sector. The country grapples with water scarcity, distribution issues, overconsumption, and prolonged droughts, resulting in the development of the Water Sector Green Growth National Action Plan (2021-2025). This plan aims to address the main water-related challenges by enhancing both the supply and demand for water, increasing access for vulnerable members of society, and fostering innovative water management practices among public sector policymakers (Karam, 2020, p. 7). Jordan's transparent financial plan, providing access to venture capital and loans, has also contributed to its economic stability, making it a significant player in the Middle East and North Africa region and influencing its foreign policy.

Jordan has taken up climate-smart agriculture in its agricultural sector, cultivating drought-resistant crops and innovative proxy measures that will help increase production yields, allowing enough food to be produced despite the impacts of climate change to withstand food security shocks. The neoclassical realist perspective helps to liberate the so-called domestic-international dichotomy by incorporating micro and macro considerations from both short-and

long-term temporal horizons (Foulon, 2015, p. 651). Thus, Jordan's state actors might study bio-IT papers to guesstimate global climate change reports and select the crops to be planted in any given year or seek better farming practices to cut GHG emissions.

Climate-smart agriculture has shown to be a practical socioeconomic alleviation of climate change effects, such as an increase in tomato and date yields, in 2022, while olive farming remained stable (Ghaith, 2022). This success suggests that replicating Jordan's case of climate-smart agriculture in developing countries using neoclassical realism can be an effective strategy for building states' resilience against climate change by increasing agricultural productivity without higher environmental costs.

We found that Jordan's neoclassical realist-inspired domestic policies have propelled it toward an institutionally effective set of climate change policies and sectoral responses in water management and agriculture. Thus, the two pillars of neoclassical realism apply, namely the centrality of domestic capabilities and policies in shaping the state's approach toward great power politics.

4.4 Macro-level Climate Strategies: National Policies and Global Agreements

Mitigation actions have been dealt with at the macro level. The goal of reducing climate is to generate strength among communities or countries to minimise climate change's influence (Dietz et al., 2020, p. 137). In the neoclassical realism approach, policy and practice are meant to address the loss and damage caused by climate change for the betterment of an extended group of people or society/societal level, wherein we see the workings of international collaborations like the Kyoto Protocol, UNFCCC, UNEP and the Paris Agreement.

Establishing the Climate Change Directorate by the Ministry of Environment in Jordan illustrates the nation's 'strong commitment to respecting important international agreements including the UNFCCC and the Kyoto Protocol recommendations.' Jordan announces its intention to take on climate change on home soil (Al Zoubi, 2015, p. 12).

The Climate Change Directorate has advocated, developed, and implemented specific programs of climate mitigation and adaptation that are closely aligned with and supported by the policies, structures, and practices of the IOs. In this way, Jordan's policies on climate change have been made compatible with a larger web of governmental and nongovernmental practices in the region and internationally, while also placing climate change issues at the forefront of Jordan's foreign policy – signaling its constructive involvement in global climate change developments.

In foreign policy, neoclassical realism could also be relevant as it points out that a state's action is affected by its interests, and its behaviour is underlined by national security issues (Jorgji & Vampa, 2018, p. 29). Although Jordan is a smaller state, its case shows successful interest representation at the international level.

While the global policy regime, along with a country's position in the global hierarchy, are undoubtedly important factors, domestic factors should not be underestimated in their influence on foreign policy decisions. Internal factors should be key drivers of any foreign policy, as is evident in Jordan's progressive response to climate change. This perspective shows how domestic and international interests can interact when a country formulates its foreign policy responses to such negative externalities as climate change.

An example of this macro intervention is the case of Jordan, receiving assistance through the Green Climate Fund to 'strengthen resilience' and enhance water management practices to

mitigate challenges posed by climate change (United Nations Jordan, 2021). Such interventions seek to enhance the resilience of vulnerable areas and populations in a country through national-level macro interventions that impact many communities in a region. Neoclassical realism suggests that the domestic-societal structure of nations is a defining factor for their ability to make international decisions that are oriented towards helping the nation cope with climate justice challenges.

Similarly, neoclassical realism emphasises the effect of leadership or political regime in improving efficiency to achieve gains from trade (relatively more than others) (Purdon, 2017, p. 302). Jordan's establishment of the Jordan National Committee on Climate Change reflected how the country's leadership reflected the prototypical political characteristics of embracing diversity while coordinating multiple government agencies to implement policies relating to climate change (Al Zoubi, 2015, p. 30). This multiagency coordination improved the efficiency of Jordan's implementation of domestic administrative procedures to achieve relative gains in climate change mitigation.

Neoclassical realism stresses that states' foreign policies determine 'through processes of interaction' an international outcome (Juneau et al., 2019, p. 11). Domestic policies and actions in each country, therefore, play a large role in defining the outcome of international climate policies, not only because transitioning will have an impact on the national economy but also because it will affect the state's trajectory and its ability to engage with others in the international effort to avoid the climate crisis. In a unified government response that would have an impact at a scale not only within a country but internationally, the domestic and the international become inextricably linked. Crucially, the ability of each country to influence the international struggle against climate breakdown is therefore contingent on its efforts and commitments.

5. Concluding Remarks

Using neoclassical realism to analyze Jordan’s climate change response forms a significant part of the analysis. It revealed how domestic and international factors have influenced the choice of strategy. Jordan has pursued a comprehensive climate change strategy, which resonates with the array of foreign policy goals: the country adapted to climate change at the micro, meso and macro levels by having individual people make choices, institutional actions, and national systems. Examining various levels of analysis, including domestic and international factors, showed that climate change mitigation was made possible through the interdependence of activities at different levels.

The neoclassical focus remains on the behavior of the state and on the extent and type of domestic factors that condition foreign policy choices. It emphasizes the role of national institutions in shaping a country’s ability to act effectively on external issues such as climate change. Jordan’s international engagement, expressed in support of international cooperation and treaties, demonstrates a real appreciation of how climate change is a global problem requiring global cooperation.

Although this study provided a neoclassical realist understanding of how Jordan’s government responds to climate change, it’s just the beginning. More work is needed to test the usefulness of the neoclassical realist approach to climate change politics using a different sample. If we conduct more neoclassical realist studies on government responses and climate change cooperation, we can better understand how states approach climate change politics.

Overall, then, Neoclassical realism provides a precise framework through which one can analyze research into international and domestic mitigation policies in relation to anthropogenic climate change and underline how all the key actors – governments, the public and organizations – play a crucial role in how a state will ultimately tackle climate change.

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