



Authors

Dr Marianna Poberezhskaya, PhD

Research Project Co-
Leader

Associate Professor in
Politics and International
Relations

Nottingham Trent
University, UK

[marianna.poberezhska@
ntu.ac.uk](mailto:marianna.poberezhska@ntu.ac.uk)

Dr Imad El-Anis, PhD

Research Project Co-
Leader

Associate Professor in
International Political
Economy

Nottingham Trent
University, UK

imad.el-anis@ntu.ac.uk

Ms. Hala Al-Hamawi, MSc

Research Project
Investigator

[hala-al-
hamawi@hotmail.com](mailto:hala-al-hamawi@hotmail.com)

Advancing climate change policy in Jordan: strengthening national, regional and international positions

Policy Brief

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Summary

The Hashemite Kingdom of Jordan is one of the world's most natural resource poor, arid and freshwater stressed countries. It is also exceptionally vulnerable to the effects of climate change and has limited mitigation and adaptation capacities. Importantly, the negative consequences of anthropogenic climate change have been exacerbated by associated infrastructural, demographic, and economic pressures. Hence, for the Hashemite Kingdom to ensure its national economic, social and political stability, it needs to develop and maintain robust mitigation and adaptation policies which accommodate a wide variety of voices. Furthermore, while Jordan (being a minor emitter) is rarely mentioned in global climate change talks, due to its importance in Middle Eastern regional politics, this situation needs to change and the country's needs ought to be elevated at international discussions.

Policy Recommendations

- Increase the budgetary and institutional power of the Climate Change Directorate to enhance national capacity to respond to climate change.
- Ensure greater coordination between the governmental institutions involved in climate change mitigation and adaptation efforts to allow for more efficient implementation of the relevant policies, increase impact, avoid duplication of efforts, and pool resources.
- Populate and maintain a database of past and present climate change-related projects in Jordan that were/are supported by external funding.
- Embed an ongoing strategy of representation at international negotiations (e.g. COPs) with teams prepared six to 12 months in advance of key events.
- Consistently include civil society voices in the planning and implementation of climate change-related policies.
- Consistently support national scientific capacity building and popularise Carbon Literacy Training among educators at all levels with a particular emphasis on greater involvement of Social Sciences provisions.

Introduction

Jordan is a small developing state that has already been suffering from several long-term environmental problems (including freshwater scarcity, arable land degradation, desertification, drought, extreme heatwaves, and loss of biodiversity) causing social, economic, and political security challenges. Climate change exacerbates these existing problems. Furthermore, the Jordanian economy and society are highly vulnerable to climate change due to their relatively low levels of resiliency and some existing gaps in mitigation and adaptation policies. For instance, the kingdom is experiencing rapid

demographic growth (Jordan's total population has increased by approximately 57% since 2010), urbanisation (from 78% of the total population in 2000 to 92% in 2021) and industrialisation (industry accounts for 17% of GDP, up from 13% in 2000) which lead to further climate change-inducing anthropogenic behaviour. Furthermore, being situated near complex political conflicts means that Jordan will likely remain a host state to a large number of refugees (with one of the highest ratios of refugees to citizens in the world at approximately 1:3) for the foreseeable future. It will also remain a strategically vital partner in this politically complex part of the

Middle East. **Hence, a comprehensive and inclusive climate change policy which has a strong legislative framework and is robustly implemented on the ground is important not only for Jordanian economic and social stability but is also critical for regional stability.**

National Policies: the emerging legislative and institutional framework

Jordan experiences both structural limitations and opportunities to its economic development which have implications for the kingdom's ability to meet its climate change emission reduction ambitions, and its ability to adapt to the adverse consequences of climate change. On the one hand, the Jordanian economy is quite small with a GDP of approximately \$44.98 billion¹; it is integrated into the global economy which offers opportunities for trade and investment but also makes Jordan highly vulnerable to regional and global processes; and it suffers from significant natural resource scarcities. On the other hand, rapid demographic growth; urbanisation; industrialisation; diversification of services; the expansion of agriculture through the adoption of new technologies; increasingly mobile lifestyles; growing consumerism and evolving resource-intensive production patterns; and outdated machinery in industry are all key factors shaping Jordan's environmental challenges.²

Despite these challenges, Jordan has made substantial progress in its national climate change policy making and institutional structures. It prides itself on being one of the first countries in the region to sign the Paris Agreement. In 2013, it issued its first Climate Change Policy (2013-2020) which then was reinforced by the National Green Growth Plan (2017), Green Growth National Action Plans (2021-2025) and the Climate Change National Adaptation Plan (2021). Jordan has also submitted (2016) and updated (2021) its Nationally Determined Contribution to the UNFCCC. In 2019, Jordan adopted its first Climate Change By-law which has further solidified the country's legal framework for climate change policy. In 2022, Jordan is expected to publish the second National Climate Change Policy (2022-2050) which aims to mainstream climate change in all policies, strategies and action plans across all sectors, and offers a comprehensive overview of the current strategies and proposed policies. **However, this body of work lacks a robust 'prescriptive' element which hinders the effective implementation of the suggested steps.** While it is now agreed at the national level that Jordan is moving towards a low-carbon society with a high level of resiliency, **it is important to provide for greater legal enforcement capacity for climate-related policies and practical implementation steps.** At the same time, we do not advocate for a one-sided command-and-control approach on its

¹ IMF, 2021, Country data – Jordan. <https://www.imf.org/en/Countries/JOR#atagance>, accessed on 13/09/2021.

² Shamaileh, A. Y., 2016, 'An Evaluation of the Effectiveness of Environmental Policy in Jordan', *International Journal of Business and Management*, 11(2): 92-118.

own (i.e. the creation of laws, regulations and so on) but a mix of policy instruments including price-based and rights-based approaches as well³.

Similar arguments are applicable to considerations of relevant institutional structures. While the Ministry of Environment remains a UNFCCC focal point, and the Climate Change Directorate was created in 2014 to manage all climate change strategies in Jordan and represent the country at the international level, there is still a lack of institutional capacity to oversee climate change-related policies and their implementation. **The Directorate would benefit from a higher number of permanently recruited staff, and a larger and consistent budget allocated to its activities.** Due to the complexity of the climate change problem, **it is crucial to have consistency and longevity of the staff employed in the key climate change policy-making positions.** This will ensure that specific knowledge, skills, networks and strategies will be embedded and retained.

A range of stakeholders: facilitating coherency among stakeholders

Due to the nature of Jordan's geographical vulnerabilities and the foundation of its climate change-related policies, a wide range of governmental institutions are involved. This includes the Ministry of Environment, the Ministry of Water and Irrigation, the Ministry of Agriculture, the Ministry of Energy and Mineral

Resources, the Ministry of Health, the Ministry of Planning and International Cooperation, the Ministry of Transport, the Civil Defence Directorate and so on. Furthermore, for various internal and external reasons, Jordan has become a hub for a range of national and international stakeholders who are interested in climate change or climate change-related topics. For example, the Ministry of Environment hosts a number of offices for large IOs that work in close proximity to the state bureaucrats and civil servants and are able to develop long-lasting relationships. Finally, Jordan is seeing a growing number of NGOs working on environmental or environment-linked issues (now in excess of 100) and activists (especially, among the younger population) who are keen to not only implement a range of community-based projects but also to be actively involved in policy-making processes.

However, analysis of the data collected through elite interviews, an extensive documentary review, and a two-day workshop held in Amman with over 30 key stakeholders has highlighted **the urgent need for greater coordination between all relevant stakeholders in the country**, including various ministries and other governmental institutions, international organisations, scientific institutions, and members of national NGOs and other civil society groups. Whilst a few mechanisms have been put in place (e.g. the National Climate Change Committee), in practice some important voices remain silent.

³ Shamaileh, A. Y., 2016, 'An Evaluation of the Effectiveness of Environmental Policy in Jordan', *International Journal of Business and Management*, 11(2): 92-118.

There is also potential duplication of the efforts of various stakeholders and a lack of coordination between various externally funded projects that take place in the country. **Thus, a system of tracking and cross-checking existing efforts would eliminate unnecessary activities/work and allow for a more efficient and effective use of resources.**

Lastly, comprehensive climate change mitigation and adaptation policies suggest extensive work with the scientific community. Due to the global nature of the climate change problem, it is necessary to engage with the international expert network, **yet it is also crucial to constantly invest in building, expanding and retaining national scientific capacity.** In fact, ensuring consistent work with the local scientific community will allow for the implementation of National Climate Change Policy plans (2021), for example, to ‘build capacity to understand, analyze and [be] proactive in the wake of future climate change impacts within the country’. The conducted research has also shown that whilst there is a growing expertise within the natural sciences, and some introduction of climate change-specific knowledge is happening across higher and secondary education institutions, there is a clear need for: **1) more infusion of climate change-related modules or topics within Social Sciences provisions; and 2) Carbon Literacy Training among educators at all levels.**

All of the above outlined issues could be alleviated by the efficient work of the proposed

National Climate Change Centre which could serve as a bridge between interested stakeholders and allow for the accumulation of contacts and information of ongoing projects and activities.

[International negotiations: strengthening Jordan’s voice in global climate politics](#)

Jordan is scarce in practically all of the natural resources that are essential for a modern economy and has had to rely on supplies of fuel, food, metals and building materials among other resources from external sources. This puts the country in the difficult situation of being persistently dependent on external actors for key supplies. For example, the kingdom has to rely on imports of GHG-emitting crude oil and natural gas, which cost Jordan approximately US\$3.5 billion per year⁴ (IEA, 2021). Apart from the economic insecurity that this entails, burning imported fossil fuels is the primary source of Jordan’s contribution to climate change. The more fuel that is burned, the more aggravated climate change’s effects are, the more vulnerable Jordan becomes, and the more resources are needed in order to adapt to climate change (e.g. increased energy consumption to power air conditioning units during heatwaves). All these factors affect Jordan’s stance and position in regional and international politics including climate change-related meetings. However, as data shows, Jordan can portray itself as being aligned with

⁴ IEA, 2021, Jordan Key Energy Statistics. <https://www.iea.org/countries/jordan> Accessed on 13/09/2021.

the leaders of the global climate change regime. Firstly, Jordan has been able to achieve its previous CO2 reduction goal (of 14%) and has set an even more ambitious goal of a 31% reduction to the base line year (2016). Secondly, Jordan has been able to reduce its dependence on fossil fuel imports by advancing its renewable energy sector, in particular, with the expansion of solar power which in 2020 made up 21% of the kingdom's energy mix. Thirdly, due to Jordan's pacifying role in the Middle East and being a traditional hub for large numbers of refugees, **the country is in a strong position to receive a range of climate change funding and demonstrate its capacity to be a forerunner in adaptation policies** (which has already been

indicated via its extensive National Adaptation Plan (2021)).

However, to strengthen Jordan's international and regional stance in climate change politics, **it is necessary to keep fostering the capacity and experience of the national negotiating teams.** For instance, it is advisable for the major meetings (such as those hosted and supported by the UNFCCC) to **have teams set and prepared six to 12 months in advance.** It is also beneficial to run a series of prior meetings/workshops to develop national negotiating strategies and determine how many and what types of meetings the delegation needs to arrange/attend in order to pursue its agenda.

Conclusions

Over the last two decades anthropogenic climate change has aggravated existing environmental challenges in Jordan, exposing the country's economic, political and social situation to new challenges. Therefore, **Jordan is in need of a consistently strong set of climate change mitigation and adaptation policies that involve a range of stakeholders, which are supported by a solid legislative framework, and which are further reinforced at the implementation stage.** This will enable Jordan to protect its population from current and future climate change-related threats as well as position Jordan as a climate change mitigation and adaptation champion at the regional and global levels. Indeed, climate change-related policies and projects have already allowed for extensive financial, technical and political support from external actors and **if Jordan continues to present a strong case, the situation will remain politically and economically favourable for the kingdom to pursue its broader ambitions.**



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