

Women's Empowerment in Jordan: Climate, and Development Policy Gap Analysis and Assessment

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Received: 18/1/2024
Revised: 4/3/2024
Accepted: 16/4/2024
Published online: 20/2/2025

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Citation: Albaddawi, E. (2025).
Women's Empowerment in Jordan:
Climate, and Development Policy
Gap Analysis and
Assessment. *Dirasat: Human and
Social Sciences*, 52(3), 6686.
<https://doi.org/10.35516/hum.v52i3.6686>

Abstract

Objectives: This study aimed to systematically analyze main climate adaptation, economic, and developmental policies in Jordan to uncover how the concept of women's empowerment and see how it was incarnated in these strategic policy documents. Specifically, the study examines 15 key national climate and developmental policies, with particular attention to women's engagement in entrepreneurial and income-generating activities

Methods: The study used the gap analysis approach to analyze the policy documents, integrating a self-designed thematic gap analysis model to investigate contextual elements within the policies. This model seamlessly merged an initial keyword search phase with a subsequent detailed thematic coding process, offering a comprehensive understanding of how women's empowerment and entrepreneurship were incarnated and addressed within the policy documents.

Results: The study results suggested that women are positioned well in climate policy; however, efforts to delineate women's empowerment on a regional basis through the implementation of green energy solutions appear to be missing. In addition, while women's economic empowerment through entrepreneurship in vulnerable communities was recognized, it lacks depth and adequate consideration, particularly in financing mechanisms.

Conclusions: The study examined that pivotal policies in Jordan underscore the significance of women's participation in crafting enduring climate and developmental strategies. While the investigation underscored shortcomings in certain aspects (such as the integration of green growth and financial mechanisms), the study recommends that collaborative consultation with external experts is advised to bolster these policies. Additionally, capacity-building efforts targeting the most vulnerable communities, particularly in modern entrepreneurial tools and practices, are recommended to foster more efficient economic activities

Keywords: Women empowerment, Gap analysis, Climate change, Developmental policies, Jordan, Economic empowerment.

تمكين المرأة في الأردن: تحليل وتقييم الفجوات في السياسات المناخية والتنمية

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ملخص

أهداف الدراسة: تهدف الدراسة إلى إجراء تحليل منهجي للسياسات الرئيسية المتعلقة بالتأقلم مع التغيرات المناخية، السياسات الاقتصادية، بالإضافة إلى السياسات التنموية في الأردن، بهدف تسليط الضوء على كيفية تجسد مفهوم تمكين المرأة في هذه السياسات الاستراتيجية. وبالتحديد، تحلل الدراسة 15 وثيقة تمثل هذه السياسات الوطنية، مع التركيز بشكل خاص على مشاركة النساء في الأنشطة الريادية والأنشطة المدرة للدخل.

المنهجية: تم استخدام منهجية تحليل الفجوة لمعاينة الوثائق المتضمنة للسياسات، مع دمج نموذج تحليل الفجوة الموضوعي الذي تم تطويره ذاتياً لاستكشاف التفاصيل السياقية المتضمنة في هذه السياسات. جمع هذا النموذج بين مرحلة البحث الأولية بالكلمات الرئيسية مع مرحلة تفصيلية لعملية الترميز الموضوعي، مما يوفر فهماً شاملاً لكيفية تصوير تمكين المرأة في السياسات الرئيسية المعالجة في هذه الدراسة.

النتائج: تشير النتائج إلى تمتع المرأة بمكانة جيدة نسبيًا في السياسات المناخية بشكل عام؛ ومع ذلك، يبدو أن الجهود المتعلقة بتمكين المرأة على نطاق إقليمي محلي من خلال تبني حلول الطاقة الخضراء مفقودة. علاوة على ذلك، بينما يوجد اعتراف بتمكين المرأة اقتصاديًا من خلال ريادة الأعمال خصوصًا في المجتمعات الضعيفة والهشة، إلا أن هذه الجهود ليست بالعمق والقدر الكافي، خاصة فيما يتعلق بآليات التمويل.

الخلاصة: أظهرت الدراسة أن السياسات الرئيسية في الأردن أكدت على أهمية مشاركة النساء في صياغة الاستراتيجيات المناخية والتنمية. في حين أظهرت الدراسة قصورًا في بعض الجوانب (مثل دمج المسائل المتعلقة بالنمو في الحلول الصديقة للبيئة وآليات التمويل)، يُوصى بالتشاور البناء والتعاوني مع خبراء خارجيين لتعزيز هذه السياسات. بالإضافة إلى ذلك، يُنصح بجهود بناء القدرات التي تستهدف المجتمعات الأكثر ضعفًا، خاصة فيما يتعلق بالأدوات والتقنيات الحديثة، لتعزيز الأنشطة الاقتصادية الفعالة بشكل أكبر.

الكلمات الدالة: تمكين المرأة، تحليل الفجوة، تغير المناخ، السياسات التنموية، الأردن، تمكين اقتصادي.



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1. Introduction

Women empowerment (WE) as an active, multi-dimensional process which enables women to achieve their full identity and powers in all spheres of life (Pillai1995), it has gained momentum in the last decades, it aims genuinely to promote vulnerable women's full potential and drive sustainable economic growth worldwide (UN Women, 2022; World Bank, 2021; Zetterli, 2023). The World Bank emphasizes the enhancement of women's ability to access resources and make choices, thereby contributing to economic and social development (World Bank, 2021). WE are a multifaceted concept with definitions varying in institutional, geographical, and cultural contexts. According to the United Nations, WE involves empowering women to take control of their lives and gain equal access to economic opportunities (UN Women, 2022).

Economic stagnation, the unprecedented COVID-19, geopolitical instability, societal attitudes, and climate change are major weakening factors hindering women's economic empowerment and may exacerbate existing vulnerabilities in developing countries, including Arab countries (Homayounet al., 2023; Abid et al., 2022). There is a growing understanding that women's roles in environmental and climate action should be significant, reflecting the interconnectedness of empowerment with sustainable development and tackling climate change through the green transition ambitions made in the Green Deal (Wolf et al., 2021). Integrating these perspectives, WE continues to emerge as a dynamic process that necessitates collaborative efforts to address diverse challenges such as climate change and simultaneously create a more equitable society (Zetterli, 2023).

Jordan's female labor force participation rate, ranked fifth from the bottom among 185 countries and territories by the IMF (2022), stands at a mere 15.3%. Despite progress in female education in Jordan, labor force participation among women remains remarkably low (Koburtay et al., 2023). The country struggle with glaring deficiencies in women's economic and political empowerment, as well as gender inequality, posing significant challenges for Jordanian women. Recognizing women's empowerment as pivotal for fostering inclusive societies and sustainable growth rates, the Arab world particularly Jordan, has placed considerable emphasis on initiatives aimed at enhancing gender's status. However, persistent barriers to economic participation hinder women from fully realizing their potential and contributing meaningfully to society.

The problem of the study

A considerable volume of research has been directed toward women's empowerment, with several of these studies proposing various strategies or mechanisms for achieving this goal.

However, it seems that there is a significant limitation when it comes to the extent to which women's empowerment and the strategies for efficiently utilizing available resources to accomplish the objectives specified in Jordan key policies documents. Likewise, women's economic empowerment through entrepreneurship was also poorly addressed. Furthermore, women's roles in environmental and climate action, which are interconnected (Wolf et al., 2021), were not addressed adequately. There is credible scientific evidence that Jordan is severely affected by climate change (prolonged drought, and heat waves) which drastically reduced agriculture activities, available jobs, and domestic food production (IPCC, 2007, 2011; Hamdi et al., 2014).

The hypothesis of the study

The study was centered around the following hypotheses:

- Women's empowerment strategies within environmental, development and climate action policies are inadequately addressed.
- There is a gap in addressing women's economic empowerment through entrepreneurship within policies frameworks
- Policies concerning climate change in Jordan lack sufficient integration of women's empowerment strategies and efficient resource utilization strategies, potentially limiting their effectiveness.
- There are discrepancies in the presentation and implementation of women's empowerment Jordan's key climate adaptation, economic, and developmental policies, regarding WE concepts, potentially hindering the effectiveness of these

policies in achieving gender-inclusive sustainable development goals.

The importance of study

The absence of active female participation in economic, political, and environmental domains hinders societal advancement, highlighting the pivotal significance of the presented study. Despite progress in policies design in Jordan, the limited societal outcomes underscore the crucial necessity of the presented research.

The objectives of the study

The objective of the presented study is to conduct a systematic analysis of Jordan's key climate adaption, economic, and developmental policies to reveal contextual appearances of WE concept in these strategic policy documents.

Objectives were extended further to:

- Analyze Jordan's climate adaptation policies and identify the presentation of WP in tackling climate change and whether WE are adopted.
- Analyze Jordan's developmental and green growth policies to identify the presence of WE and methods of empowerment, if they exist.
- Identify gaps in policy and practices and identify discrepancies in WE narratives.

Literature Review

Substantial research within the Arab world has been dedicated to exploring gender dynamics and women's studies, encompassing a diverse array of issues linked to WE and challenges facing it (Sidani, 2005; Metcalfe, 2008; Maltby et al., 2010; Afiouni, 2014; Tlaiss, 2015; Abuhussein & Koburtay, 2021; Althalathini et al., 2021; Koburtay et al., 2023). Some studies referred to cultural barriers hindering women's well-being (Karam & Afiouni, 2017), while other studies focused on "basic" women's rights such as getting a driving license, voting rights, and acquiring senior positions (Abuhussein & Koburtay, 2021; Karam & Afiouni, 2017). Some investigated women's participation in a quite demanding sector, such as the solid waste management, with a population of refugee background involvement and challenges facing that (Saidan et al., 2020). Banihani (2020) investigated the challenges affecting women in their businesses and identified several barriers confronting women, including limited mobility options and safety, restrictions related to family obligations, and, importantly, the social favoritism and nepotism that the men exercise to acquire additional economic benefits into their businesses.

Jordan, a middle-income country with a population of close to 11 million, has been affected much by a series of geopolitical crises such as the Gulf War in 1991, the Iraq Invasion in 2003, and the Syrian social turmoil in 2011 (World Bank, 2021). Jordan stretches over 89 342 km² square kilometers and is divided into 12 provinces (governorates). Due to its desert-dominated conditions, approximately 90% of Jordan's population is concentrated in the northwestern quadrant, where water is more accessible. Only 10% of the land is arable land due to its arid features and limited natural resources. Water scarcity severely limits opportunities for rural development and is deemed a significant impairment to economic growth and development, particularly in rural most areas.

several research endeavors have highlighted further challenges faced by women in Jordan, including a struggling economy, high banking interest rates, a general lack of financial literacy, insufficient collateral, a reluctance to take risks, and the need to balance family responsibilities. These factors significantly hinder women's participation in business ownership (Mehtap et al., 2016). Additionally, some studies have focused on elements that aid in women's empowerment. For instance, it has been found that educational attainment and computer skills significantly boost their entrepreneurial endeavors (Abdelrahmimsid, 2017).

In the Arab world which shares many similarities with Jordan, women's participation in labor forces and engagement in entrepreneurial activities are among the lowest globally (Kaasolu et al., 2019). In countries like the Kingdom of Saudi Arabia and Jordan, it is estimated between 20% to 30% compared to the global average of 49% (World Bank, 2021). While they are crucial components of Jordan's enduring development strategy, social inclusion and poverty alleviation encounter

substantial obstacles, especially concerning the empowerment of women (Hirschberger, 2021). According to the Department of Statistics in Jordan (DOS, 2015), women-led businesses still account for a low percentage of all active businesses, especially in Medium Enterprises (SMEs). For instance, women comprise less than 5% of CEOs in listed companies in the Middle East and North Africa (MENA) region (OECD, 2022). In the MENA region, women generate only 18% of GDP, suggesting greater inclusion is a major economic growth opportunity.

The Arab women's situation has been exacerbated (socially and economically) due to regional geopolitical conflicts and civil wars in Sudan, Syria, Yemen, Libya, and Iraq, rendering women's ability to engage in entrepreneurial activities rather complicated and unsafe. Developing countries aim to integrate the WE concept and approach into the national development, climate, and energy policies to boost women's participation in co-creating innovative solutions while finding them business and employment opportunities.

Data and Method

Data collection

The data was based on mostly on policy documents. The climate change (CC) policies, energy, poverty, and sustainable development policies have been collected to be included in this analysis. To gather a comprehensive overview of Jordan's climate change policies, the Ministry of Environment, Directorate of Climate Change, was contacted and solicited a list of Jordan's climate change policies along with synoptic descriptions. The Ministry, acting as the national administrative body for the United Nations Framework Convention on Climate Change (UNFCCC), provided key insights. Additionally, various national institutions and ministries were reached to acquire strategic documents in the water, transport, energy, waste, and environment sectors, with particular attention to the agriculture sector due to its pivotal role in rural economic development.

Table 1. Illustrates Jordan's key climate change policies, *Code* denotes the code to be used in the presented study, *Year* denotes the year of document publication

Policy title	Code	Year
Jordan's Third National Communication on Climate Change	CLIM01	2014
National Climate Change Policy Adaptation Plan	CLIM02	2021
National Climate Change Policy of the Hashemite Kingdom of Jordan 2022-2050	CLIM03	2022

Policy documents in Arabic, such as the ones published by the Social and Economic Council (State of the Country reports), were excluded from the analysis. The content of the policies was not discussed with the relevant institutions. Table 1 summarizes the list of key policies collected, and Table 2 presents the key strategy documents.

Table 2. Illustrates Jordan's key climate change policies with their coding (to be used in the current study) and *Year* denote the year of publication

Policy title	Code	Year
A National Green Growth Plan for Jordan	DEV01	2017
Jordan 2025, A National Vision, and Strategy (2015) (also called "Vision 2025")	DEV02	2015
Agriculture Development National Strategy 2020-2025	DEV03	2020
Agriculture Sector: Green Growth National Action Plan 2021-2025	DEV04	2020
The Jordanian Constitution (with amendments as of 2021)	DEV05	2021
Jordan's Sustainable Development Report	DEV06	2021
Energy Sector Green National Action Plan 2021-2025	DEV07	2021
National Strategy and Action Plan for Sustainable Consumption and Production in Jordan 2016 - 2025	DEV08	2016
Jordan's Way to Sustainable Development: First National Voluntary review on the implementation of the 2030 Agenda.	DEV09	2015
The National Strategy for Women in Jordan 2020 – 2015 (under update)	DEV10	2020
General Framework for Gender Equality in Jordan	DEV11	2022
WASTE SECTOR: Green Growth National Action Plan 2021-2025	DEV12	2021

Analysis methodology

The presented study followed a gap analysis (see Franklin, 2006) to identify discrepancies or gaps in knowledge, understanding, or research. It involves identifying areas where there is limited or no discourse, highlighting gaps in understanding and/or presenting the subject. Ultimately, evaluate the effectiveness of current policies or practices and identify areas with shortcomings or discrepancies.

The analysis was conducted through a self-designed thematic gap analysis model, which integrated an initial keyword search phase with a more in-depth thematic coding process. A keyword search was done using the terms including "women empowerment" (WE) and "entrepreneurship." This search was instrumental in quantitatively assessing the frequency of these terms within the policy texts. Note tags were placed at each occurrence of these keywords, documenting the presence of WE and entrepreneurship and the specific contexts they were mentioned in, such as education, employment, business, and differences between rural and urban settings.

Building upon this preliminary quantification, the study then engaged in thematic coding. This phase went beyond simple keyword frequency to deeply understand the context and depth with which WE and entrepreneurship were discussed in the policies. Thematic coding allowed for a nuanced analysis of how these concepts were integrated and framed within the policies and whether they were aligned with the broader policy goals. Furthermore, the model identified thematic gaps where WE and entrepreneurship were inadequately addressed or overlooked. This gap identification process was crucial in highlighting the areas within the policy framework that required further attention or revision. In addition, the analysis encompassed a contextual examination of the broader socio-political environment to interpret the implications of these identified gaps. By integrating both keyword frequency analysis and thematic coding, the study provided a comprehensive understanding of the representation and treatment of women empowerment and entrepreneurship in the policy documents. Analysis was implemented partially using ATLAS.ti tools (See Muhr, 1993).

Results and discussions

Presentation of WE in Jordan's climate policies

Within the climate policies analysis, an emphasis was on highlighting whether resources were mobilized for rural women's empowerment and through which mechanisms. CLIM01 The policy highlights the income gap of rural women in the agriculture sector. It refers to indirect "measures" to increase rural women's productivity through improved access to training, extension services, and technology—however, there is no further elaboration on what this might entail and what kind of technology is in question. CLIM02 is Jordan's first Climate Change National Adaptation Plan (NAP). It presented challenges confronting women in agriculture production and lack of knowledge of climate change as major hindering factors to adaptation plans, referencing UN Women (2014). It claimed gender and youth mainstreaming to ensure a gender-sensitive approach, including youth, to enhance resilience and decrease vulnerabilities. The document focuses mainly on advocacy, community, and stakeholders' engagement to participate in the decision-making process. One objective of this policy is to achieve gender equality and "empower all women and girls" and implement reforms to provide women "equal rights to economic resources, access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws." This quoted paragraph can be considered the only reference to women's empowerment. Yet again, no additional inputs nor elaboration was presented on how these measures will be implemented and through which financing mechanisms.

CLIM03 is an updated policy from the previous policy to integrate new insights and lessons learned from previous activities. However, the new document references neither women's empowerment nor women's entrepreneurship. It mainly refers to cross-cutting issues to offer more opportunities or measures such as inclusiveness, women enabling, disaster risk management, urban migration, and refugees, respectively. It refers to national poverty reduction policies and action plans to increase women's climate adaptation. Again, this policy has no clear visions or prospects on how supporting women, particularly, will be implemented. The analysis showed a common understanding among the climate policy documents that elevate women's knowledge and capacities that are unequivocal and integral parts of the national climate policies on

achieving sustainable development goals. Women's empowerment, however, has limited scope as the documents do not provide clear guidelines and measures (fiscal, regulatory, sector-wise) on how WE through entrepreneurship will be implemented throughout the targeted period (up to 2025).

Presentation of WE in Jordan's developmental policies

DEV01 and DEV02 are landmark developmental policies referring to visions for green growth in Jordan. The two documents emphasized the importance of improving employment rates, particularly among women, as a driver for green growth in Jordan. However, they did not elaborate on how these improvements can be achieved. The economic situation is generally weak in Jordan due to regional conflicts and the overall high-interest rates and inflation that ravaged the global economy since Russia's invasion of Ukraine in 2022. The employment rate among educated women remains low. This is where fiscal measures and incentives tailored for women are needed to enhance women's access to finance for their businesses. DEV03 and DEV04 are key policy documents in the development of Jordan's agriculture sector. These two policies were selected due to the share of women working in the sector and the contribution to household income. For example, the UN Women estimates that 52% of rural Jordanian women work in agriculture. The policies highlighted the challenges in the sector, such as low wages, poor working conditions, and competition from foreign less paid workers (e.g., refugees). The main goal of these policies is to "Improve the skills and capacity of farmers, rural communities, youth and women to undertake sustainable agriculture." Financing new solutions through women's businesses remains unclear, and the only proposed mechanism is through loans provided by the Agricultural Credit Corporation (ACC).

In DEV07, a multifaceted approach is posited to bring more women into the energy sector, including supporting women in Science, Technology, Engineering, and Mathematics (STEM) related education and removing the barriers to entering the workforce. A gap was identified related to the measures needed to elevate the women's skills and capacities in participating in green energy projects either at small or large scale.

DEV06 and DEV09 refer to Jordan's pathway to achieving sustainable development goals emphasizing sustainable production and consumption. Successive governments have been tasked to bolster women's rights and their empowerment, focusing on increasing their participation in the economic, social, and political sectors. The DEV06 recognizes WE as a crucial prerequisite for sustainable development. Women empowerment (WE) enjoys high political support orchestrated by His Majesty King Abdullah (King of Jordan) through a series of 'debate papers' published in the local press. The King's narratives emphasize "the positive contributions of women in all political, economic, social, environmental and cultural fields recognizing women as crucial partners in sustainable development and reforms for a better future."

In the waste management sector (DEV12), women can play a catalytic role in shifting waste management behaviors in society; however, there are underlying gender and social development issues in waste management. The presence of a culture that stigmatizes certain behaviors, the prevalence of stereotypical beliefs among both women and men and societal misconceptions about recycling constitute significant impediments to adopting efficient household waste recycling strategies.

Table 3 summarizes the key gaps' indicators in the developmental policies (energy, agriculture, sustainable development, waste, green growth, and gender equality and women empowerment legislations).

Table 3. Women empowerment's indicators in climate and developmental policies and strategies. *Gap* denotes the key gap indicator to be identified

WE indicators	Gap1	Gap 2	Gap 3	Gap 4
Education and capacity building	Educated women have no employment opportunities	men have more access to the internet	Men often get more capacity building and training in both public and private sector	Higher education achievements are lower in rural area poverty pockets

WE indicators	Gap1	Gap 2	Gap 3	Gap 4
Digital skills	No vision for digital skills development for women outside the labor sector.	Private sector has no interest in supporting women's initiatives	Skills acquisition is often costly for women to enroll	The government has plans but no clear guidelines
Employment	Men's employment rate is still higher than women. Insufficient data from the informal sector.	Men are still preferred in some sectorial jobs	Favoritism and nepotism hinder women's positions in upper-level positions	Inflation and high interest rates and effects on the local economy
Entrepreneurship training including financial literacy	Innovation and entrepreneurship are not yet common in Jordan	Access to digital and technology training is limited for women	Market and sectorial niches for entrepreneurship are limited geographically	Internet and digital capacities and skills are limited in Jordan to overall weak and costly Internet subscriptions
Access to financing	Limited financial literacy	Limited access to credits	High risks associated with women's loan applications	Microfinancing in rural areas is available through state initiatives.
Safety and risk avoidance	Safety issues related to mobility and public transport	Safety to work away from home	Distance/remote work is not common yet in both public and private sectors	Societal barriers on women's movement and interaction with men in rural areas
Legal and institutional support	Limited/weak legal and institutional support to support women through incentives	Limited support to develop investment plans	No collateral support from governments for women's loan applications	Overall limited resources in the state budget to create new fiscal incentives
Rural women support	Lack of community-led initiatives toward developing businesses	Rural areas are not receiving enough developmental aid from the state budget	Limited opportunities in rural areas besides the agriculture sector	Women generally are less interested and less motivated (frustrated)
Others, general	Poor/limited child-caring facilities in rural areas	Competition from low-paid -refugee women	Poor public transport systems	Public sector employment is attractive to women

Advancement of gender rights

Jordan has enjoyed certain reforms which are seen as significant victories for women's rights. This is also depicted in the General Framework for Gender Equality in Jordan, as illustrated (e.g., DEV11), which pertains to constitutional reforms concerning women's empowerment up to 2022. For example, in January 2022, the government approved new legislation to incorporate women at the constitutional level. The title of Chapter 2 of the Constitution was changed from "Rights and Duties of Jordanians" to "Rights and Duties of Jordanian Men and Women," specifically including the word "women" for the first time. A reform also added under Article 6 (No. 6) regarding women, which states: "The State guarantees the empowerment and support of women to play an active role in building society in a way that guarantees equal opportunities on the basis of justice and equity and protects them from all forms of violence and discrimination."

Climate and WE interplay

Achieving climate goals requires the involvement of all spectra of the population, and women are expected to continue to play a pivotal role in building climate resilience in communities contributing to successful strategies and disaster response efforts. Women worldwide have been involved in many nature-based solutions, new cropping systems, and using

indigenous knowledge blended with new technologies and innovations to develop local economic activities (Gaspers et al., 2022). Jordan has included women in all climate policy documents with the aim of enhancing their resilience and tolerance to severe impacts of extreme events, such as droughts and heatwaves. However, the participation of Jordanian women in climate change advocacy and collaborative solution development has been modest. Decision-making, committee meetings, and roundtable discussions are often made in the capital Amman without sufficient representation of rural women or their immediate needs.

Regarding climate adaptation, initiatives such as green programs have often seen explicit support from women. For instance, women have shown a particular interest in installing solar heaters at home for domestic use, as highlighted in the study by Zyadin et al. (2014). However, community-led initiatives to install more solar are still limited, and women are not explicitly participating in co-creating such initiatives. Moreover, none of the policy chapters put emphasis nor efforts to outline region-wise women's empowerment through green energy solutions, which was a major shortcoming, contrary to other parts of the world (i.e., EU), there is a strong emphasis on this issue (Wolf et al., 2021).

Financial inclusion disparity

Within the policy documents examined in the presented study, there were no insights about women's access to credits and whether research has been conducted in this domain, particularly in rural areas of Jordan. In entrepreneurial activities, businesses owned by females are typically infrequent, small in scale, operate seasonally, have informal structures, are home-based, engage in low-productivity tasks, and face challenges in accessing markets. For instance, in 2018, only 4% were employers or own-account workers (DOS, 2015). Most of the women's entrepreneurial activities mainly include restaurants, bakeries, knitting, and beauty salons in homes. In rural areas, unemployed/retired women often engage in small-scale dairy production, daycare for children, and limitedly in making olive/paprika pickles. Income from these activities is relatively small and does not improve their well-being as it is blended with the household income or controlled by men. In recent years, particularly during and in the aftermath of the COVID-19 pandemic, digital entrepreneurship, such as online businesses and paid social media channels (social influencers), have boomed. However, a digital divide still exists as fewer women in the Arab world have access to descent the internet (Aidini, 2023).

Studies have shown that economic empowerment means access to financial resources both at the household level and/or outside of financing institutions, including state incentives and bank loans (Zoynul and Fahmida, 2013). In addition, access to credit programs is a powerful tool for WE as it increases women's financial security, confidence, and well-being (Kabeer, 1998; Lombe, 2012) (Iheduru, 2002; Yunus and Jolis, 2003; Lombe, 2012). In Jordan, women's access to credits is often made through bank loans with salary contracts as collateral and/or pawing or selling gold to finance more extensive projects such as building a house or purchasing a car. Women's financial resources are therefore used unsustainably and in no-income-generating activities. Like many other Arab countries, men often control the credits while women pay the creditors (Goetz and Gupta, 1996; Esplen & Brody, 2007); therefore, there is a need to integrate financing instruments for women's empowerment in policy and strategies dedicated for women in rural areas accompanied by financial literacy tools and project financial incubation at an early stage. The lack of social research and the lack of verified data to improve women's entrepreneurial infrastructures are still explicit limiting factors.

Conclusions and recommendations

The presented study has offered valuable perspectives on the deficiencies in current climate and development policies. Jordan exhibits a solid commitment to implementing strategies and policies focused on decentralization and governorate-specific action plans to empower communities, reducing poverty, mitigate unemployment effects, and strengthening local economies through government interventions, investment projects, self-employment initiatives, small and medium-sized enterprises, and pilot projects. The presented study found that all the climate, green growth, and developmental policies have stressed the role of women and the need for women's participation in designing the long-term climate and developmental policies in Jordan. However, in particular, women's economic empowerment through entrepreneurial

activities, mainly in highly vulnerable areas and poverty pockets appeared superficial and insufficiently elaborated from a financing mechanisms point of view.

It is suggested that close collaboration with external expertise and consultation with key international institutions is beneficial to enhance the results further and to make a roadmap or improvement to mitigate the gaps in Jordan's current climate and development policies. Furthermore, addressing the existing research gap must be addressed by prioritizing capacity-building initiatives. By increasing and expanding the scale of research on women empowerment through research grants provided to graduate students in universities and collaboration with the Ministry of Digital Economy and Entrepreneurship, Jordanian National Commission for Women, Higher Council for Science and Technology, and Scientific Research Fund and encouraging the private sector such as large Telecommunication companies (Zain, Orang, Umniah) and large industries such as Jordan Cement, Potash just a few to mention to finance the student's research grants. Insights from peer-reviewed research can be integrated with national policies. These also extended to be more inclusive in on-site training for demanded modern skills that improve women's literacy on internet use, ICT solutions, and project management.

Acknowledgment

The author is grateful for the financial support granted by the Stipendium Hungaricum Scholarship to conduct this research as part of the doctoral dissertation. The author thanks the experts consulted regarding the most recent policies and strategies published within Jordan's climate change, green growth, and developmental policies.

REFERENCES

- Abdelrahmimsid, H. (2017). The impact of women entrepreneurs in the Jordanian economy. *Information and Knowledge Management*, 7(9), 39–47.
- Abid, M., Gheraia, Z., Abdelli, H., Sekrafi, H., & Diaw, A. (2022). COVID-19 pandemic and economic impacts in Arab countries: Challenges and policies. *Research in Globalization*, 5, 100103.
- Abuhussein, T., & Koburtay, T. (2021). Opportunities and constraints of women entrepreneurs in Jordan: an update of the 5Ms framework. *International Journal of Entrepreneurial Behavior & Research*, 27(6), 1448–1475.
- Afiouni, F. (2014). Women's careers in the Arab Middle East: Understanding institutional constraints to the boundaryless career view. *Career Development International*, 19(3), 314–336.
- Aidini, E. (2023). *Digital divide: how to connect those who are not connected? The case of the arab region*. <https://archive-ouverte.unige.ch/unige:171136>
- Althalathini, D., Al-Dajani, H., & Apostolopoulos, N. (2022). The impact of Islamic feminism in empowering women's entrepreneurship in conflict zones: Evidence from Afghanistan, Iraq and Palestine. *Journal of Business Ethics*, 178(1), 39–55.
- Banihani, M. (2020). Empowering Jordanian women through entrepreneurship. *Journal of Research in Marketing and Entrepreneurship*, 22(1), 133–144. <https://doi.org/10.1108/JRME-10-2017-0047>
- Department of Statistics (DOS). (2015). *Labor Force Survey*. Retrieved from http://www.dos.gov.jo/dos_home_e/main/linked-html/Emp&Un.htm
- Esplen, E., & Brody, A. (2007). *Putting gender back in the picture: rethinking women's economic empowerment*. Institute of Development Studies: Bridge (development-gender).
- Franklin, M. (2006). *Performance gap analysis: Tips, tools, and intelligence for trainers* (Vol. 603). American Society for Training and Development.
- Gaspers, A., Oftebro, T. L., & Cowan, E. (2022). Including the Oft-Forgotten: the Necessity of including women and indigenous peoples in nature-based solution research. *Frontiers in Climate*, 4, 831430.
- Goetz, A. M., & Gupta, R. Sen. (1996). Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh. *World Development*, 24(1), 45–63.
- Hamdi, R., Van de Vyver, H., De Troch, R., & Termonia, P. (2014). Assessment of three dynamical urban climate downscaling methods: Brussels's future urban heat island under an A1B emission scenario. *International Journal of Climatology*, 34(4), 978–999.

- Hirschberger, F. K. (2021). *Gender policies as resource for authoritarian regime resilience in Jordan*.
- Homayoun, S., Velashani, M. A. B., Abbas Alkhafaji, B. K., & Jabbar Mezher, S. (2023). The Effect of COVID-19 on the Performance of SMEs in Emerging Markets in Iran, Iraq and Jordan. *Sustainability*, 15(10), 7847.
- Iheduru, O. C. (2002). Social concertation, labour unions and the creation of a black bourgeoisie in South Africa. *Commonwealth and Comparative Politics*, 40(2), 47–85.
- IPCC. (2011). *Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*.
- IMF. (2022). Staff Country Reports, Jordan Case. Retrieved January 2, 2024, Retrieved from <https://www.elibrary.imf.org/view/journals/002/2022/222/002.2022.issue-222-en.xml?Tabs=contentssummary-102775>
- Kaasolu, S., O'Brien, T., Hausmann, R., & Santos, M. (2019). Female labor in Jordan: a systematic approach to the exclusion puzzle. Available at SSRN 3808864.
- Kabeer, N. (1998). *Money can't buy me love? Re-evaluating gender, credit and empowerment in rural Bangladesh*. Institute of Development Studies.
- Karam, C. M., & Afiouni, F. (2017). Women and the legitimization of (not) engaging in paid work: Logics from Lebanon. *Career Development International*, 22(6), 628–658.
- Koburtay, T., Abuhussein, T., & Sidani, Y. M. (2023). Women Leadership, Culture, and Islam: Female Voices from Jordan. *Journal of Business Ethics*, 183(2), 347–363. <https://doi.org/10.1007/s10551-022-05041-0>
- Lombe, M., Newransky, C., Kayser, K., & Raj, P. M. (2012). Exploring barriers to inclusion of widowed and abandoned women through microcredit self-help groups: The case of rural south india. *J. Soc. & Soc. Welfare*, 39, 143.
- Maltby, L. E., Hall, M. E. L., Anderson, T. L., & Edwards, K. (2010). Religion and sexism: The moderating role of participant gender. *Sex Roles*, 62, 615–622.
- Mehtap, S., Caputo, A., & Pellegrini, M. M. (2017). Encouraging female entrepreneurship in Jordan: environmental factors, obstacles and challenges. *Entrepreneurship and Management in an Islamic Context*, 207–225.
- Metcalf, B. D. (2008). Women, management and globalization in the Middle East. *Journal of Business Ethics*, 83, 85–100.
- Muhr, T. (1998). ATLAS. ti Scientific software development GmbH. *User's Manual for ATLAS. Ti*, 5.
- OECD. (2022). *OECD Report on the implementation of the OECD Gender Recommendations for the Meeting of the Council at Ministerial Level, 9-10 June 2022*.
- Pillai, J. K. (1995). *Women and empowerment*. New Delhi: Gyan Publishers House.
- Saidan, M., Draï, A. A., Al-Manaseer, E., Alshishani, M., & Linton, C. (2020). Scale and impacts of livelihoods development on women empowerment in the solid waste sector of Jordan. *Detritus*, 10, 212–224.
- Sidani, Y. (2005). Women, work, and Islam in Arab societies. *Women in Management Review*, 20(7), 498–512.
- UN WOMEN. (2014). United Nations entity for gender equality and the empowerment of women. *Fourth World Conference on Women. Platform for Action and the Beijing Declaration*. Retrieved from : [Http://Www. Un. Org/Womenwatch/Daw/Beijing/Pdf/BDPfA20E](http://Www.Un.Org/Womenwatch/Daw/Beijing/Pdf/BDPfA20E).
- UNFCCC. (2023). *Five Reasons Why Climate Action Needs Women*. Retrieved from <https://unfccc.int/news/five-reasons-why-climate-action-needs-women>
- Wolf, S., Teitge, J., Mielke, J., Schütze, F., & Jaeger, C. (2021). The European Green Deal—more than climate neutrality. *Intereconomics*, 56, 99–107.
- World Bank. (2021). *Using Digital Solutions to Address Barriers to Female Entrepreneurship*. Retrieved from <https://digitalforwomen.worldbank.org/access-finance>
- Yunus, M., & Jolis, A. (2003). *Banker to the poor: Micro-lending and the battle against world poverty*. Public Affairs (first published 1991).
- Zetterli, P. (2023). *Climate Adaptation, Resilience, And Financial Inclusion*.
- Zoynul, A. M., & Fahmida, M. (2013). Women Empowerment Through Micro Credit: A Case Study Of Dinajpur, Bangladesh. *Studies in Business & Economics*, 8(2).
- Zyadin, A., Puhakka, A., Ahponen, P., Cronberg, T., & Pelkonen, P. (2012). School students' knowledge, perceptions, and attitudes toward renewable energy in Jordan. *Renewable Energy*, 45, 78–85.