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# ADAPTING TO CHANGE

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GENDERED (WOMEN)  
CHALLENGES, AND PATHWAYS TO  
EMPOWERMENT IN IRAQ

Raed Aldulaimi, Dahab Aglan,  
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# Adapting to Change: Climate Displacement, Gendered (Women) Challenges, and Pathways to Empowerment in Iraq

Raed Aldulaimi, Dahab Aglan, Hasan Azeez and Firas Salih



## About the Authors

**Raed Aldulaimi** is an Assistant Professor of Political Science at Al-Imam Al-Adham University College, Iraq, focusing on politics in the Middle East and North Africa region. His published work highlights non-state actors in Libya, as well as post-conflict reintegration and sectarianism in Iraq.

**Dahab Aglan** is a Teaching and Research Fellow in Economics at the University of Oxford, St Edmund Hall. She holds a PhD in Economics from Royal Holloway, University of London. Her research examines public policies shaping the integration and welfare of conflict- and climate-displaced populations in Iraq, using statistical methods and field experiments on camp closures and post-conflict integration.

**Hasan Azeez** is a development leader and environmental advocate working at the intersection of climate change, education, and social policy in Iraq. He has trained as an engineer and has an advanced diploma in public policy, having led several national- and international-level projects that revolve around climate-resilient water security and youth empowerment. Most of these projects have been specifically to respond to and meet the needs of marginalised and displaced communities.

**Firas Salih** is a Senior Business Consultant and economic researcher specialising in private sector development, post-conflict economic recovery, and innovation-driven growth. He holds an MBA in Finance and previously led Private Sector Development (PSD) programmes with GIZ, designing interventions for MSMEs in post-conflict settings.

## Abstract

Climate change poses substantial challenges for climate-displaced women in developing countries, where limited education and social norms can hinder access to labour markets, social integration and political engagement. This study evaluates the effectiveness of a training programme on displaced women's willingness to engage with and participate in the labour market, social networks and political activities within local communities. Using rich pre-and post-training survey data from 36 women displaced by climate shocks from southwestern Mosul, our findings show that women's willingness to work or start a business increases significantly after the training, as does their willingness to engage with elected officials to address displacement-related challenges. However, we do not find evidence of improved willingness to integrate with host communities, reflecting women's perceptions of limited support in their host communities and highlighting the challenges of climate displacement. Our findings highlight the need for local and national governments to expand educational and vocational programmes for climate-displaced women while also investing in host communities to reduce social tensions and promote inclusive recovery.

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## Introduction

Iraq is highly affected by climate-related extreme weather events, including droughts, floods, heatwaves and dust storms which negatively impact the environment, agriculture, water availability, health and other aspects of daily life.<sup>1</sup> As rivers dry up and more land becomes unproductive across Iraq, thousands of families who used to depend on agriculture and livestock are now forced to leave their areas of origin and settle in urban settings. Internal displacement involves not only changes in geography but also disruptions to traditional lifestyles and community structures. These disruptions exacerbate the insecurity faced by vulnerable populations. Women are especially vulnerable to climatic variability.<sup>2</sup>

In Iraq, climate-displaced women are forced to leave the land and skills they once relied upon and arrive in urban areas in Baghdad, Basra and Ninewa, where they find themselves unprepared for the labour markets of these cities and largely excluded from economic opportunities. Recently, the World Economic Forum ranked Iraq as one of the least gender-equal countries, with women experiencing significantly lower levels of economic participation and opportunities than men.<sup>3</sup> Thus, climate-displaced women bear the double burden of economic marginalisation and the need to adopt coping strategies to adjust to a new and unfamiliar environment while caring for their families.

To address climate-induced challenges, our study aims to explore the impact of training sessions on the economic empowerment, social integration and political engagement of climate-displaced Iraqi women. Using a case study of southwestern Mosul (Ninewa-northern Iraq), we conducted a training programme to raise awareness and build capacity on participation in the labour market, engaging with local communities and reaching out to their elected officials to help mitigate the consequences of their displacement. We apply a before-and-after design, which, to the best of our knowledge, is the first in Iraq and the Middle East to generate a longitudinal dataset on climate-displaced women. This approach allows us to quantify immediate and short-term changes in their willingness to integrate and engage, an often-overlooked dimension among a largely neglected population in the literature.

While research on women and climate adaptation in climate-affected countries is growing,<sup>4</sup> the impact of climate change on women's empowerment, economic aspirations, and attitudes toward social and economic integration remains underexplored in the Middle East,

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<sup>1</sup> Katongo Seyuba et al., 'Climate, Peace and Security Factsheet', SIPRI (2023). Available at: <https://www.sipri.org/publications/2025/partner-publications/climate-peace-and-security-fact-sheet-south-sudan-2025> (accessed 4 July 2025).

<sup>2</sup> Fatma Denton, 'Climate Change Vulnerability, Impacts, and Adaptation: Why Does Gender Matter?', *Gender and Development* 10/2 (2002), pp. 10–20; Sarah L. McKune, Erica C. Borresen, Alyson G. Young, Thérèse D. Auria Ryley, Sandra L. Russo, Astou Diao Camara, Meghan Coleman & Elizabeth P. Ryan, 'Climate Change through a Gendered Lens: Examining Livestock Holder Food Security', *Global Food Security* 6 (2015), pp. 1–8.

<sup>3</sup> World Economic Forum, 'Global Gender Gap Report 2021', WEF, 30 March 2021. Available at: <https://www.weforum.org/publications/global-gender-gap-report-2021/> (accessed 15 June 2025).

<sup>4</sup> Clara Delavallade, Mélanie Gittard & Julia Vaillant, 'Women and Climate Adaptation in Rural Sub-Saharan Africa', *World Bank* (2025).

where Iraq stands out as the most climate-vulnerable country in the region.<sup>5</sup> Building on the argument that economic development can result directly from the economic empowerment of women, we design and implement an intervention in Mosul to support climate-displaced women's economic, social and political integration in their new communities.<sup>6</sup>

This paper is divided into four sections. The first section discusses the context of climate change and migration in Iraq. The second section presents women's empowerment from both global and Iraqi perspectives. The third section describes our intervention framework and methodology, and the last section concludes and provides policy recommendations.

## Adaptation and Women's Empowerment: A Global Perspective

Climate change affects most people, yet women are more vulnerable to that change.<sup>7</sup> Globally, women have more limited access than men to resources that could strengthen their capacity to adapt to climate change.<sup>8</sup> This limited access significantly constrains women's ability to face new challenges.<sup>9</sup> Lack of financial resources or access to relevant technology and markets are major obstacles to women's empowerment.<sup>10</sup> This gender-based disparity is attributed to women's generally lower income levels, limited education, and restricted access to information, institutions and decision-making bodies that shape societal outcomes.<sup>11</sup>

However, adaptation can be an active tool to mitigate the severity of the process of development and promote sustainable development.<sup>12</sup> Adaptation in this situation can incentivise women to actively participate in social life and think more broadly about sustainable development goals.<sup>13</sup> Also, economic empowerment of women through climate mitiga-

<sup>5</sup> The Atlantic Council, 'Climate Profile: Iraq', *Rafik Hariri Center for the Middle East*, 9 May 2023. Available at: <https://www.atlanticcouncil.org/programs/middle-east-programs/rafik-hariri-center-for-the-middle-east/mena-futures-lab/macromena/climate-profile-iraq/> (accessed 22 September 2025)

<sup>6</sup> Ashrafuzzaman Md, Carla Gomes, João Miguel Dias & Artemi Cerdà, 'Exploring Gender and Climate Change Nexus, and Empowering Women in the South Western Coastal Region of Bangladesh for Adaptation and Mitigation', *Climate* 10/11 (2022), p. 172.

<sup>7</sup> Nitya Rao, Arabinda Mishra, Anjal Prakash, Chandni Singh, Ayesha Qaisrani, Prathigna Poonacha, Katharine Vincent & Claire Bedelian, 'A Qualitative Comparative Analysis of Women's Agency and Adaptive Capacity in Climate Change Hotspots in Asia and Africa', *Nature Climate Change* 9/12 (2019), pp. 964–971.

<sup>8</sup> Women's Environment & Development Organization (WEDO), 'Changing the Climate: Why Women's Perspectives Matter', WEDO (2007). Available at: <https://wedo.org/wp-content/uploads/changing-the-climate-why-womens-perspectives-matter-2008.pdf> (accessed 9 June 2025).

<sup>9</sup> Christine Jost, Florence Kyazze, Jesse Naab, Sharmind Neelormi, James Kinyangi, Robert Zougmore, Pramod Aggarwal, Gopal Bhatta, Moushumi Chaudhury, Marja-Liisa Tapio-Bistrom, Sibyl Nelson & Patti Kristjanson, 'Understanding Gender Dimensions of Agriculture and Climate Change in Smallholder Farming Communities', *Climate and Development* 8/2 (2016), pp. 133–144.

<sup>10</sup> Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2020: Impacts, Adaptation and Vulnerability* (Cambridge: Cambridge University Press, 2023). Available at: <https://doi.org/10.1017/9781009325844> (accessed 14 November 2025).

<sup>11</sup> Goh AHX 'A Literature Review of the Gender-Differentiated Impacts of Climate Change on Women's and Men's Assets and Well-Being in Developing Countries', *CAPRI Working Paper* 106, International Food Policy Research Institute, Washington, D.C (2012).

<sup>12</sup> Md et al., 'Exploring Gender and Climate Change Nexus, and Empowering Women in the South Western Coastal Region of Bangladesh for Adaptation and Mitigation', pp. 1–38

<sup>13</sup> Thomas F. Stocker, ed., *Climate Change 2013: The Physical Science Basis: Working Group I Contribution*

tion and adaptation initiatives promote economic growth and broader socio-economic development, reduces poverty, contributes to environmental sustainability and enhances adaptive capacity, benefiting both women and men.<sup>14</sup> In Bangladesh, for instance, research shows that women are more likely than men to adopt practices aligned with their existing livelihood roles, such as improved livestock feeding and grain storage techniques, provided they have sufficient awareness of these practices.<sup>15</sup>

## Conditions of Displacement and Barriers to Adaptation in Iraq

Like many countries around the world, Iraqi women are also disproportionately affected by climate change and frequently have fewer livelihood options and resources than men. As livelihoods deteriorate, women often assume additional responsibilities for supporting their families and managing livestock, particularly when men migrate to urban areas in search of employment.<sup>16</sup> Residents of Mosul noted that employment opportunities in the city are very limited, observing that when villagers migrate to urban areas, they often have nothing to do because of the absence of adequate infrastructure and economic markets to support them.<sup>17</sup>

From the social perspective, climate-induced migration is increasingly displacing families from their traditional homelands and placing them in unfamiliar environments where social safety nets, such as trusted neighbours and tribal networks, are absent.<sup>18</sup> Therefore, public attitudes toward migration in urban areas are predominantly unfavourable, largely driven by perceptions that migrants compete for economic opportunities and exacerbate pressure on already limited public services,<sup>19</sup> which makes xenophobia from host communities in urban areas widespread.<sup>20</sup> In addition, domestic migrants in Iraq driven by climate-change impacts – i.e., inhospitable environments and lack of livelihood – encoun-

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to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge: Cambridge University Press, 2014).

<sup>14</sup> Sandra Bährge, 'Climate Change and Gender: Economic Empowerment of Women through Climate Mitigation and Adaptation?', Working Paper, *Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH Eschborn Germany* (2010), pp. 1–22. Available at: <https://gsdrc.org/document-library/climate-change-and-gender-economic-empowerment-of-women-through-climate-mitigation-and-adaptation/> (accessed 12 June 2025).

<sup>15</sup> Elizabeth Bryan, Edward Kato & Bernier Quinn, 'Gender Differences in Awareness and Adoption of Climate-Smart Agriculture Practices in Bangladesh', in: Joshua Eastin & Kendra Dupuy, eds, *Gender, Climate Change, and Livelihoods: Vulnerabilities and Adaptations* (Wallingford: Centre for Agriculture and Bioscience International, 2021), pp. 123–42.

<sup>16</sup> United Nations Development Program (UNDP), 'Ahwari Women, The Beating Heart of the Iraqi Marshes', UNDP, 8 March 2021. Available at: <https://www.undp.org/iraq/stories/ahwari-women-beating-heart-iraqi-marshes> (accessed 10 June 2025).

<sup>17</sup> Center for Civilians in Conflict (CIVIC), 'Climate Change and Civilian Protection in Iraq', July 2022.

<sup>18</sup> Malin Möbjörk, Florian Krampe & Kheira Tarif, 'Pathways of Climate Insecurity: Guidance for Policy-makers', *Stockholm International Peace Research Institute* (2020). Available at: [https://www.sipri.org/sites/default/files/2020-11/pb\\_2011\\_pathways\\_2.pdf](https://www.sipri.org/sites/default/files/2020-11/pb_2011_pathways_2.pdf) (accessed 10 August 2025).

<sup>19</sup> International Organization for Migration (IOM), 'Migration into a Fragile Setting: Responding to Climate-induced Informal Urbanization and Inequality in Basra, Iraq', IOM (2021). Available at: <https://reliefweb.int/report/iraq/migration-fragile-setting-responding-climate-induced-informal-urbanization-and> (accessed 26 June 2025).

<sup>20</sup> Tarek Ghani & Robert Malley, 'Climate Change Doesn't Have to Stoke Conflict', *Foreign Affairs*, 28 September 2020. Available at: <https://www.foreignaffairs.com/articles/ethiopia/2020-09-28/climate-change-doesnt-have-stoke-conflict> (accessed 28 June 2025).

ter many of the same barriers as conflict-induced internally displaced persons (IDPs).<sup>21</sup> As one former farmer from Ba'aj (Ninewa) reported: 'in the city people say, "you're from the village, why did you come here to create problems?"'.<sup>22</sup> Furthermore, restricted access to social networks represents a major obstacle to women's adoption of climate change. Looking at the context of Africa, for example, these networks play a crucial role in disseminating information and enabling social learning.<sup>23</sup>

Finally, women's political engagement can also make a difference in terms of adapting to climate change. Women's participation in political processes strengthens economic, social and governmental capacities, thereby reducing societal vulnerability to climate change. In Iraq, a primary challenge is the absence of strong government support for initiatives that can mitigate the migrants' conditions of displacement due to the low prioritisation of these programmes on the political agenda.<sup>24</sup> Therefore, we argue that exposure of displaced women is expected to increase their willingness to engage with elected officials to change the conditions of displacement through local and national governments.

## Intervention Framework and Methodology

Our paper examines whether a tailored training programme can strengthen the economic, social and political engagement of climate-displaced women by enhancing their awareness, intentions and motivations. Designed to address barriers to adaptation in displacement, our training programme was evaluated using a before-and-after design to capture changes in women's willingness to integrate within their host community. With the support of local *mukhtars* (community leaders), we surveyed 36 climate-displaced women from southwestern Mosul who now reside in urban Mosul.

Table 1 Panel A shows that, on average, the women in our sample are 36 years old, therefore of labour market participation age in Iraq. Over half of the women have less than secondary education. Additionally, nearly half of the families in our sample, most of whom are headed by men, earn less than 275,000 Iraqi Dinars (IQD) per month (£153.64 or \$209.79).<sup>25</sup> This threshold corresponds to the transfer value that Iraqi Ministry of Labor and Social Affairs (MoLSA) allocates to male-headed households below the poverty line with at least four household members.<sup>26</sup> These families therefore survive on incomes below what the government provides to the poorest households, which highlights their acute economic vulnerability.

<sup>21</sup> Paula Garcia, 'Ignoring Iraq's Most Vulnerable: The Plight of Displaced Persons', *Center for Civilians in Conflict*, 12 April 2021. Available at: [https://civiliansinconflict.org/wp-content/uploads/2021/04/CIVIC\\_Iraq\\_Report\\_Final-Web.pdf](https://civiliansinconflict.org/wp-content/uploads/2021/04/CIVIC_Iraq_Report_Final-Web.pdf) (accessed 10 June 2025).

<sup>22</sup> CIVIC, pp. 14.

<sup>23</sup> Timothy G. Conley & Christopher R. Udry, 'Learning about a New Technology: Pineapple in Ghana', *American Economic Review* 100/1 (2010): 35–69; Enid Katungi, Svetlana Edmeades & Melinda Smale, 'Gender, Social Capital and Information Exchange in Rural Uganda', *Journal of International Development* 20 (2008): 35–52.

<sup>24</sup> Zeynep Kaya & Kyra Luchtenberg, 'Displacement and Women's Economic Empowerment: Voices of Displaced Women in the Kurdistan Region of Iraq', *GAPS, LSE Centre for Women, Peace and Security, and WfWi* (2018). Available at: [www.womenforwomen.org.uk](http://www.womenforwomen.org.uk) (accessed 10 September 2025).

<sup>25</sup> Exchange rates throughout this paper obtained from Xe.com, as of September 2025.

<sup>26</sup> Mireia Termes, 'Survival Minimum Expenditure Basket, Minimum Expenditure Basket, Gap Analysis and Transfer Values for Cash Programming', *CashCap, Norwegian Refugee Council and REACH* (2023).



Table 1: Descriptive Statistics: Profiles of Climate-Displaced Women and their Families

		Mean	Std. Deviation	No. of responses
<b>Panel A: Demographic Data</b>				
	Age (in years)	36.44	15.27	36
	Has less than secondary education <sup>27</sup> (%)	58.33	50	36
	Married (%)	63.89	48.71	36
	Number of family members (incl. participant)	6.13	2.32	30
	Head of family earns below IQD 275k/month (%)	44.44	50.4	36
	Husband is head of family (%)	50	50.71	36
	Male is head of family (%)	75	43.92	36
	Owns smart phone (%)	97.22	16.67	36
	Household has access to internet (%)	94.29	23.55	35
<b>Panel B: Host Location Characteristics</b>				
Reasons for Moving to Location	Housing prices (%)	8	27.69	25
	Security (%)	32	47.61	25
	Services (%)	4	20	25
	Knowledge of region (%)	16	37.42	25
	Finding work (%)	40	50	25
Perceived Integration	Finds integration difficult (%)	40	49.83	30
	Received help from host community (%)	31.03	47.08	29
	Current location is better than previous location (%)	80	40.58	35
<b>Panel C: Labour Market Profile and Employment History</b>				
	Works now (%)	20	40.58	35
Sector of Current Work	Health (%)	33.33	51.64	6
	Industrial (%)	33.33	51.64	6
	Services (%)	16.67	40.82	6
	Trade (%)	16.67	40.82	6
	Family commitments (%)	50	50.8	32
Reasons for Not Working	Lack of qualifications or skills (%)	18.75	39.66	32
	Lack of capital (%)	18.75	39.66	32
	Rejection of head of family (%)	12.5	33.6	32
	Unavailable work opportunities (%)	6.25	24.59	32
	Previously worked (%)	23.53	43.06	34
Previous Occupations	Banking (%)	14.29	37.8	7
	Agriculture (%)	42.86	53.45	7
	Sewing (%)	14.29	37.8	7
	Sales (%)	14.29	37.8	7
	Other (%)	14.29	37.8	7

Note: Number of observations varies across questions due to non-response. Descriptive statistics report the mean and standard deviation for respondents to each item. In both Panel B's 'Reasons for Moving to Location' and Panel C's 'Reasons for Not Working', participants can choose more than one option. In Panel C, the number of responses is lower because most participants are not currently employed and have limited prior work experience.

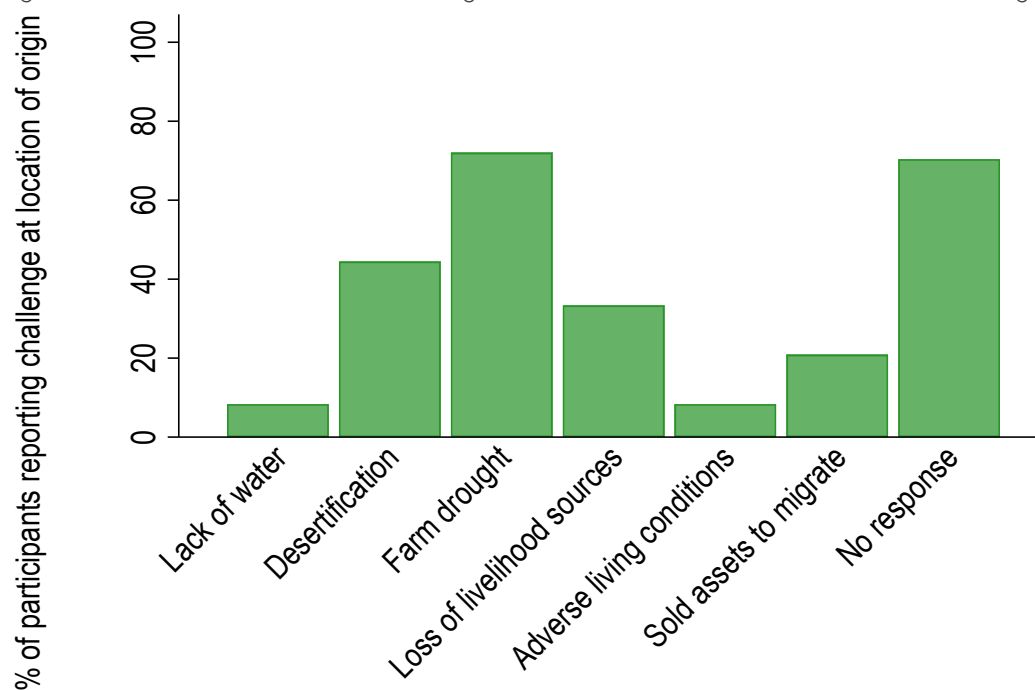
<sup>27</sup> Secondary education consists of two stages: the intermediate phase (ages 12 to 15) and the preparatory phase (ages 15–18). Upon completing the preparatory phase, students finish school. In our questionnaire, we refer to the preparatory phase.

Reasons for moving to current host locations varied, though security concerns (32%) and the pursuit of work opportunities (40%) were the most frequently reported. Smaller shares cited cheaper housing (8%) and familiarity with the area (16%). While 40% of respondents reported difficulties with integration, nearly one-third acknowledged receiving help from host community members, and 80% stated that their current location is better than the previous one. These findings suggest relative improvements in perceived safety and opportunities, even if integration remains uneven.

Labour market participation, however, remains highly constrained for climate-displaced women in urban Mosul. Only 20% of women reported currently working, with their employment spread across health, industry, services and trade, though the numbers are very small. The main barriers to employment are family responsibilities – i.e., husbands rejecting that their wives take up employment – (50%) and lack of qualifications or skills (19%), which is consistent with the fact that more than half of respondents did not complete secondary education and lack of capital (19%). Social norms for climate-displaced women also appear to play a role, as 13% of women report not working due to being forbidden by the family head.

Many of the women in our sample report facing severe climate-related challenges at their locations of origin. As Figure 1 shows, 44% of the women and their families experienced the effects of desertification and 72% reported farm drought, while 33% cited the loss of rural livelihoods. These vulnerabilities not only triggered displacement but also forced families into negative coping strategies, as 20% of climate-displaced women's families sold their assets to emigrate, which compounds the difficulties these women and their families face in rebuilding sustainable livelihoods in urban Mosul.

Figure 1: Climate and Livelihood Challenges for Women and Families at Locations of Origin



Note: Participants can choose more than one challenge experienced at location of origin.

We conducted a two-day training programme on 25–26 July 2025. We used a questionnaire that included closed-ended and open-ended questions (i.e., short answers when possible). The goal of this questionnaire was to quantify changes in the willingness of climate IDPs to socio-economically integrate within their host communities before and after the training sessions by tracking variations in participants' responses across three dimensions: economic integration, social integration and political engagement. Our five particular outcomes of interest for each dimension are as follows:

1. **Economic integration outcomes:** expected salary upon starting work or starting own business, willingness to search for employment and confidence in receiving an employment offer.
2. **Social integration outcome:** willingness to integrate within the host community.
3. **Political engagement outcome:** willingness to contact local policymakers, such as tribal leaders, heads of districts, deputy head of Provincial Council, or members of Council of Representatives

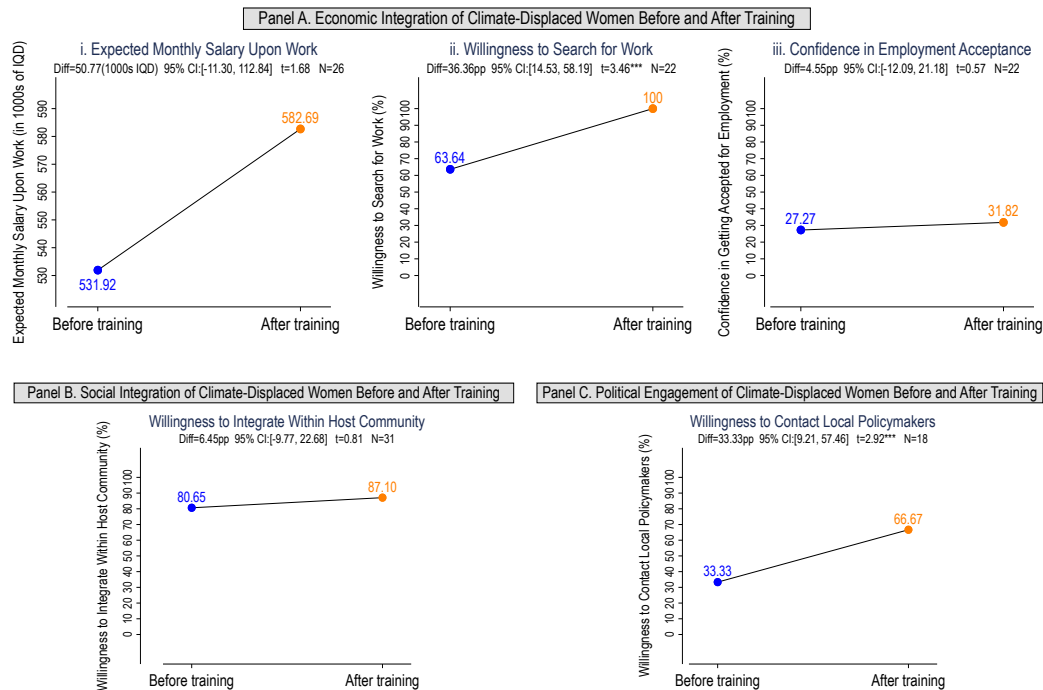
Because the same participants were observed before and after training, our analysis focuses on changes in their intentions and whether the training changes their motivations across our three dimensions of interest. That is, for each of the five outcomes above, we assess how a participant's response differs between the pre- and post-training periods. To test whether each of these changes differs significantly from zero, we conduct a paired *t*-test. This test indicates whether the observed change was unlikely to be due to chance or random variation, which enables us to assess whether the training programme is associated with changes in participants' economic and social integration and political engagement outcomes.

## Findings and Discussion

Before discussing our findings, we first check for attrition in our sample. This is an important concern in programme evaluations because if those who drop out in our analysis differ systematically from those who remain, then the estimated effects may be biased, and the findings cannot be generalised to the sample. Of the 36 women in our sample, 58% responded to every outcome question in both the baseline and follow-up surveys, while the remaining 42% answered at baseline but either did not participate in the follow-up or provided responses to only a subset of our five outcomes. We therefore test whether attrition is systematically related to baseline demographic or socio-economic characteristics. Reassuringly, we find no statistically significant differences between those that dropped out and those that remained, suggesting that our results are unlikely to be affected by selective attrition.<sup>28</sup>

<sup>28</sup> We conduct *t*-tests for our balance checks. Results for the balance checks are available upon request.

Figure 2: Training Programme and Climate-Displaced Women's Integration



Significance: \*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.1$ . CI = 95% confidence interval. N is the number of paired observations for each outcome. Figure 2Ai presents the average expected monthly salary if participants decide to work or start their own business (measured in thousands of IQD).

Figure 2 Panel A displays each economic integration outcome before and after training.<sup>29</sup> The most notable change associated appears in Figure 2Aii, where the share of climate-displaced women willing to search for work rises from 63.64% before training to universal willingness, a gain of 36.36 percentage points. This effect is both large in magnitude and statistically significant at the 1% level. While the sample size is small and the 95% confidence interval for the estimated difference in the willingness-to-work outcome remains wide, it is comparatively narrower than for the other outcomes, suggesting relatively greater precision.

To investigate which subgroups of women potentially drive the increased willingness to work, we conduct t-tests comparing changes in willingness to search for work across different characteristics of climate-displaced women. We find that the increase is concentrated among particular subgroups. Specifically, women who reported that finding work was their family's primary reason for choosing where to relocate are twice as likely to report a higher willingness to seek employment compared to those who did not cite work motives. Additionally, women who are married or single are 1.3 times more likely to express willingness to search for work compared to divorced or widowed women, suggesting that prior relocation motives and the presence of a supportive household structure could play an important role in enabling women to consider employment.

<sup>29</sup> Results and Stata do-file are available upon request.



Although nearly half of the women report family commitments as barriers to work, we do not find significant differences in willingness to work between those who report these commitments and those who do not. One explanation is that the training highlighted low-cost and low-mobility strategies of searching for work and starting income-generating activities, such as drawing on peer networks, using social media, contacting local officials and applying problem-solving skills. As a result, women with caregiving responsibilities may now view exploring work opportunities as more feasible.

While the increases in women's expected salary upon starting work (Figure 2Ai) and confidence in employment acceptance (Figure 2Aiii) are not statistically significant in this sample, the consistently positive direction of the estimates suggests potential improvements in women's perceptions of their economic prospects. These effects may become more pronounced with a larger sample or over a longer time horizon as intentions translate into action. The positive shift in perceptions is likely linked to the training content, which made the idea of entering the labour market feel more attainable to climate-displaced women, for example through demonstrating convenient ways to identify market opportunities through online inquiries and effective communication.

Our qualitative evidence from the open-ended questions corroborates our quantitative evidence regarding women's willingness to work. After the training programme was complete, women reported strong preferences for self-employment in sectors primarily serving women, such as beauty salons, cosmetics and women's clothing and accessories. Others expressed interest in restaurants, interior design or event management. To further substantiate their willingness to pursue livelihoods, we asked the women to describe the practical steps they would take to establish their projects. Many emphasised 'planning' and others highlighted activities such as 'surveying', 'seeking financial support', 'understanding community needs' and 'continuous innovation'. Overall, our evidence shows that the training programme is associated with an increase in women's willingness to work and awareness of entrepreneurial strategies to help ease the economic pressures of climate displacement.

In Figure 2 Panel B, we observe a positive but statistically insignificant association between the training programme and women's willingness to integrate within their host communities. This lack of statistical significance could be partly explained by our qualitative evidence, as women described their barriers to integration stemming from 'concerns for their children's safety', fears of 'drugs' and the difficulties of residing in 'underdeveloped areas'.

Notably, Figure 2 Panel C shows that, compared to a baseline of 33.33%, the training programme is associated with a 33% point increase in women's willingness to contact local policymakers, reaching 66.67%. While the estimated difference is highly statistically significant at the 1% level, the small sample size and relatively wide 95% confidence interval suggest uncertainty around the precise magnitude of the effect. Nevertheless, the results provide evidence of a strong and positive association between training and women's willingness to engage with local policymakers.

To better understand how climate-displaced women wish to engage with local policymakers, we asked an open-ended question on this topic at the end of the training programme. Responses included ‘with the Deputy Head of the Provincial Council’, ‘through elections’, ‘contacting their offices’ and ‘sending a group to represent’ them. These accounts suggest that women view both formal political mechanisms and direct collective action as potential pathways for engagement.

## Conclusion and Policy Recommendations

For this paper, we implemented a training programme to help empower climate-displaced women in Mosul to increase their awareness and knowledge on starting new businesses and engaging politically and socially. Using a rich dataset consisting of two rounds of surveys – i.e., before and after training sessions, we quantify how the training contributes to differences in participants’ willingness to engage within their host communities as a means of adapting to conditions of hardship. After surveying 36 displaced women in south Mosul, we find that women’s willingness to search for work increase dramatically. Importantly, our data shows that women have strong preferences for self-employment in sectors primarily serving women, such as women’s clothing and accessories.

Our findings on social integration and political engagement indicate that, compared to the pre-training period, climate-displaced women are more likely to contact local policymakers after training to help address their burdens of climate displacement, suggesting improved awareness of the value of engagement. However, we find no evidence of changes in expected wages upon employment, which may reflect limited education and skills to compete in the labour market. We do not find evidence of changes in women’s willingness to engage socially with host communities, which may reflect pre-existing income disparities and host community concerns about pressures on essential services such as water and electricity, as reported by displaced households.

However, this was a pilot study, and it was conducted within a short-term project in a small geographic area. Therefore, to generalise these findings, more research needs to be conducted to include more participants and other affected areas in Iraq including the Kurdistan region and other areas in southern Iraq. Understanding the behaviour of climate-displaced women across these communities can enhance our understanding of the impact of the interventions on their economic, political and social motives.

Our findings highlight the need for local governments, policymakers, and possibly international organisations (i.e. UNDP) to expand educational and vocational programmes that empower displaced women to confidently pursue employment or entrepreneurship. While local and national governments can work together on providing such programmes, displaced women should have access to acquiring new skills that may help them adapt to resultant challenges. In addition, governments should increase the provision of high-demand services to ease pressure on resources, reduce tensions, and promote greater social cohesion between displaced and host populations. This can be achieved through identifying cities with a high share of IDPs. Finally, offering loans for displaced women by national or local governments (through banks, special programmes, or initiatives) may incentivise them to start small businesses and improve their livelihoods.







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Women walk on a street covered with yellow dust as a dust storm hit several areas across Iraq sending dozens to hospitals with respiratory problems, Baghdad, 16 May 2022.

Credit: Ameer Al-Mohammedawi/dpa/Alamy Live News





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**Middle East Centre**  
London School of Economics  
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