



## POLICY BRIEF

# Building Climate Resilience for Women in Extreme Poverty: Adaptations and Policy Recommendations from the Government of Tunisia's Pilot Graduation Program



Enabling poor rural people  
to overcome poverty



ultra-poor  
graduation initiative

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## Introduction

Climate change, poverty, and gender are inextricably interconnected. As climate change worsens it compounds systemic inequalities and exacerbates poverty, food insecurity, and injustice, especially for women and girls. Governments must adopt an integrated approach to addressing the climate crisis, with an intentional focus on building resilience for women living in poverty.

Climate change poses unprecedented and growing threats to sustainable development. Globally, 2011-2020 has been the warmest decade on record with resulting shocks such as drought, heat waves, and flooding increasing.<sup>1</sup> At least 85 percent of the global population has been impacted by climate change,<sup>2</sup> and nearly half the world's population is estimated to be highly vulnerable to climate change but does not have the means and conditions to adapt.<sup>3</sup> People living in extreme poverty are disproportionately affected by climate change due to their dependence on climate-sensitive sectors for their livelihoods and basic needs. Many people living in extreme poverty also suffer from compounded vulnerabilities, such as inadequate access to savings and social protection services that could help them cope with the impacts of climatic shocks.<sup>4</sup>

Climate change and poverty disproportionately affect women. Women are [more likely to experience extreme poverty](#) than men and are more likely to be negatively impacted by natural disasters.<sup>5</sup> Many livelihood activities most adversely impacted by climate



change – such as fetching water – traditionally tend to be women's responsibility. Moreover, UN figures indicate that 80 percent of people displaced by climate change are women and girls,<sup>6</sup> and climate shocks reduce women's life expectancies more than **men's on average**. In addition, studies have shown that **gender-based violence** becomes more prevalent after natural disasters,<sup>7</sup> and that women living in extreme poverty often face discrimination in accessing the resources, education, and tools necessary to bounce back from the economic impacts of climate change.

Countries in the Middle East and North Africa (MENA) region are particularly vulnerable to climate

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**Women and children are 14 times more likely to die during natural disasters because of their greater vulnerability as a result of factors that include poverty and the social norms of their communities.... And after disasters strike, it is also generally much harder for poor women to recover their economic positions than their male counterparts.”**

Kristalina Georgieva, CEO | World Bank, and Ngozi Okonjo-Iweala, Chair | Global Alliance for Vaccines and Immunization

<sup>1</sup> Groundswell Part II (WBG).

<sup>2</sup> 85 Percent Population Climate Change

<sup>3</sup> [Building Resilience: How Trickle Up is Responding to Climate Change](#)

<sup>4</sup> Groundswell Part II

<sup>5</sup> [We Can't Fight Climate Change Without Fighting for Gender Equity](#)

<sup>6</sup> [Climate Change 'Impacts Women More Than Men' \(BBC\)](#)

<sup>7</sup> [We Can't Fight Climate Change Without Fighting for Gender Equity](#)

<sup>8</sup> [Cascading Climate Effects in the Middle East and North Africa](#)

shocks such as water scarcity, rising temperatures, desertification, and population movement.<sup>8</sup> These factors pose a range of harmful effects on land productivity, human health, migration, and gender dynamics.<sup>9</sup> Tunisia will be among the 33 countries most likely to experience water stress or scarcity by 2040<sup>10</sup>, which is expected to most acutely impact populations living in poverty, particularly women and farmers.<sup>11</sup>

Policymakers must bolster their societies' ability to withstand and adapt to climatic stressors by designing solutions that respond to the relationships between climate change, extreme poverty, and gender inequality. Long-term solutions that build the climate resilience of the most vulnerable people are critical; however, many policies and initiatives designed to address environmental issues ignore or actively harm these groups.<sup>12</sup> Women and people living in extreme poverty are often excluded from decision-making about responses to climate change, resulting in solutions that not only overlook their wellbeing, but may even harm the very populations that governments are aiming to protect.<sup>13, 14</sup>

According to the 2021 State of Economic Inclusion report by the World Bank, 57 percent of economic inclusion programs include interventions that address climate change as a way of protecting and enhancing the livelihood base of program



<sup>9</sup> Ibid

<sup>10</sup> [Ranking the World's Most Water-Stressed Countries in 2040 \(WRI\)](#)

<sup>11</sup> [IFAD-BRAC Collaboration Empowers Rural People to Build Resilience](#)

<sup>12</sup> The World Bank's Biennial Poverty and Shared Prosperity Report

<sup>13</sup> [Cascading Climate Effects in the Middle East and North Africa](#)

<sup>14</sup> [Climate Change 'Impacts Women More Than Men' \(BBC\)](#)

<sup>15</sup> State of Economic Inclusion Report, World Bank's Partnership for Economic Inclusion, 2021.



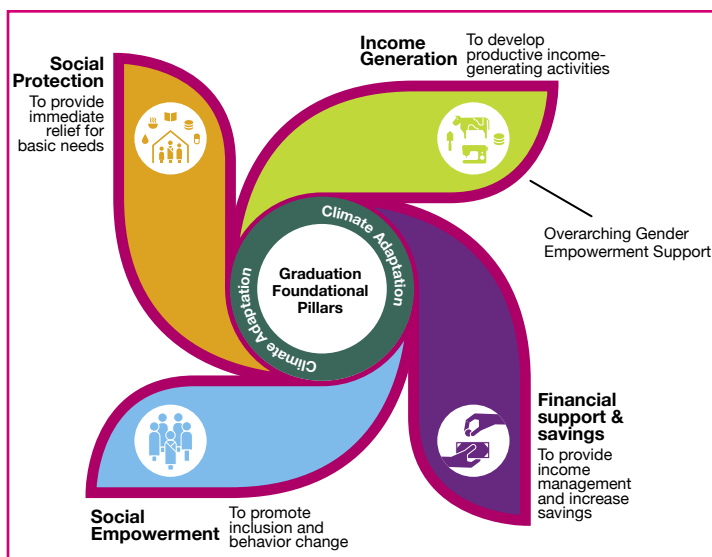
beneficiaries, such as through climate-smart agriculture, water management, and forest protection activities.<sup>25</sup>

## IESS-Kairouan Graduation Pilot

In Kairouan, Tunisia, women in extreme poverty are especially vulnerable to climate risks such as increased frequency and severity of extreme weather, changes in temperature and precipitation, and soil erosion. In addition to their socioeconomic marginalization, Tunisia's worsening water scarcity places them at greater risk. Women tend to be responsible for water-intensive household activities such as cleaning, laundering, and cooking, and many rely on large, irrigation-dependent farms for employment opportunities.

Through the *Insertion Économique, Sociale et Solidaire dans le Gouvernorat de Kairouan* (IESS-Kairouan) project, the Government of Tunisia and its Ministry of Agriculture, Water and Fisheries (MARHP) and Ministry of Social Affairs (MAS), the United Nations' International Fund for Agricultural Development (IFAD), and the Adaptation Fund have partnered with BRAC's Ultra-Poor Graduation Initiative (UPGI) to support design and implementation of a Graduation pilot program in Kairouan with emphasis on strengthening women's livelihoods in parallel with broader climate resilient infrastructure interventions.

The **Graduation Approach** is a multifaceted, evidence-based series of interventions that address poverty and gender inequality within the local context. By adapting Graduation to support



Graduation enables women to break the poverty trap: 93% of participants experienced sustained benefits in income and savings seven years after Graduation according to the London School of Economics RCT on BRAC's flagship Graduation program in Bangladesh.

sustainable natural resource management, governments are well-positioned to build resilience for vulnerable populations most affected by climate change. A rising 57% of economic inclusion programs include interventions that address climate change as a way of protecting and enhancing the livelihood base of program beneficiaries, such as through climate-smart agriculture, water management, and forest protection activities.<sup>15</sup>

The Government of Tunisia's Graduation pilot aims to strengthen participants' livelihoods through sustainable environmental practices and build the skills required to adapt to climate-related risks. In addition to addressing participants' **basic needs, livelihoods promotion, financial inclusion, and social empowerment**, the pilot adds a fifth pillar of **climate adaptation** that builds on the IESS-Kairouan project's infrastructure component. **Gender transformation** is also an overarching theme across these pillars.

### National Économique, Sociale et Solidaire dans le Gouvernorat de Kairouan (IESS-Kairouan) Project (Timeline: 2020-2025)

Objective: Increase the social, economic, and climate resilience of the poorest households in the hills of Kairouan through two components:

- 1) Support needy families and those with limited incomes with Graduation interventions, including linkages to Tunisia's National Program of Assistance to Needy Families (PNAFN) and
- 2) Support smallholder farms, including a subset of Graduation households, by improving productive infrastructure, water and soil conservation measures, strengthening producer organizations and encouraging partnerships with public and private sector actors.

Specifically, the Graduation pilot is implementing the following climate- and gender-focused adaptations:

Climate Adaptations	Gender Transformation Adaptations
Government & Policy	
<ul style="list-style-type: none"> <li>Graduation pilot participants benefit from broader IESS-Kairouan climate resilient infrastructure interventions, including: <ul style="list-style-type: none"> <li>Climate-proofed rural access roads ensure transportation access that is resilient in the face of floods, enabling women's mobility in the region;</li> <li>Disbursement of 300 rainwater collection tanks, targeting 75% women;</li> <li>Rehabilitation of deep well systems and water networks to decrease costs and improve access to drinking water; and</li> <li>400 households (65% women) receive support to plant prickly pear cactus, a low-water intensive, drought-resistant crop that buffers the erosive effects of wind and rain while supporting various livelihoods in numerous value chains.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Pilot leverages the GoT's national cash transfer program (National Programme of Assistance to Needy Families, PNAFN) to identify households classified as greatest-need and limited-income, with a focus on female-headed households.</li> <li>Women's needs will be taken into account in the roll-out of the climate-related infrastructure interventions, particularly related to home use of water and women's unique transportation needs.</li> </ul>
Community & Local Economy	
<ul style="list-style-type: none"> <li>Microzone, or small geographic community areas, were targeted for the Graduation pilot based on their climate vulnerability (difficulty accessing water and environmental degradation) as measured by: <ul style="list-style-type: none"> <li>At least 63% of the microzone's population are poor households</li> <li>Heightened difficulty in accessing water</li> <li>Heightened levels of climate vulnerability and environmental degradation</li> <li>Conducted a localized market assessment in seven microzones to ensure that it is sufficiently representative of socioeconomic, geographic, and climatic diversity within the governorate.</li> </ul> </li> <li>Market assessments and income generating activities include a climate resilience perspective to promote more climate adaptation practices such as rainwater harvesting for agricultural activities and livestock feeding, while avoiding activities that over-exploit water and natural resources, and contribute to deforestation. Livelihoods will also be analyzed for potential risk to climate shocks and complementary livelihoods with different risks will be encouraged.</li> <li>Work with communities and local leaders to sustainably manage natural land and water resources and to identify context-appropriate solutions to achieve climate resilience in the most vulnerable communities, such as rainwater collection, cistern rehabilitation, innovative water pumps, and beekeeping-based livelihoods (apiculture).</li> </ul>	<ul style="list-style-type: none"> <li>Graduation pilot mainstreams IFAD's Gender Action Learning System (GALS) methodology into all activities to give women and men more control over their development and choices while questioning underlying assumptions at the community level, including: <ul style="list-style-type: none"> <li>Participatory processes to ensure women's needs and leadership are centered in water access infrastructure;</li> <li>Working with trusted local leaders to bring community members together to agree on a shared vision for their communities and agree upon an action plan to reach their vision;</li> <li>Promotion of a robust gender empowerment strategy that promotes economic empowerment and independence, enabling women and men to have equal voices and influence within rural institutions and organizations;</li> <li>Prioritization of women for roles in village-level leadership; and</li> <li>Visioning of changes in the wider community, family, or business relations necessary to achieve gender-empowerment for the community.</li> </ul> </li> <li>Establishment of Village Social Solidarity Committees (VSSCs) to enhance women's community integration and social solidarity, and provide a platform to reinforce social messaging around gender empowerment.</li> </ul>



Household & Individual	
<ul style="list-style-type: none"> <li>• Participants offered climate sensitive livelihood options, such as prickly pear cultivation.</li> <li>• Training on climate risks and climate adaptation for populations living in poverty in Kairouan, including: <ul style="list-style-type: none"> <li>• Presentation of water distribution in the region;</li> <li>• Implications of climate change on health, education, tourism, agriculture, WASH (water, sanitation and hygiene);</li> <li>• Resilient livelihoods;</li> <li>• Kitchen gardens; and</li> <li>• Use and maintenance of rainwater harvesting tanks and cisterns).</li> <li>• Land rights</li> <li>• Disaster risk reduction (DRR) and climate change adaptation</li> </ul> </li> <li>• Market assessments and income generating activities include a climate resilience perspective to promote more climate adaptation practices such as rainwater harvesting for agricultural activities and livestock feeding, while avoiding activities that overexploit water and natural resources, and contribute to deforestation. Livelihoods will also be analyzed for potential risk to climate shocks and complementary livelihoods with different risks will be encouraged.</li> <li>• Participants are given inputs for low-water nutrition-boosting kitchen gardens, intended for self-consumption.</li> <li>• Graduation Animators are responsible for ensuring and monitoring households' access to interventions that incorporate a climate lens and access to infrastructure-level interventions from the full IESS-Kairouan project.</li> <li>• Climate resilience graduation criterion adopted: "Participant household adopts climate-resilient practices".</li> </ul>	<ul style="list-style-type: none"> <li>• Female-centered participant targeting, with provision of most interventions directly to the woman</li> <li>• The GALS methodology starts at the household level, including: <ul style="list-style-type: none"> <li>• Quality of life and livelihood journey: development of gender-empowered vision for the household and exploration of changes in household-level gender relations necessary to achieve this vision;</li> <li>• Monthly coaching to support the household's gender-empowered vision;</li> </ul> </li> <li>• Life skills and business management trainings that enhance gender-sensitive equity of household decision-making with regard to assets, livelihoods, income, savings and loans.</li> <li>• Individual and group household visits and coaching to promote gender-sensitive empowerment topics</li> <li>• Linkages to upskilling telecenters for women and youth</li> <li>• Linkages to preschool education to ease the burden of childcare on women</li> </ul>

## Policy Implications

The following policy recommendations are for government-led Graduation programs that are adapted to respond to climate change, extreme poverty, and gender inequality based on lessons learned within the IESS-Kairouan Graduation pilot. These recommendations explore how Graduation programming can incorporate adaptations at the national, community, and local level to ensure sustainability and systems-level change:

### Government Policy

**1) Use the Graduation approach as a vehicle to realize international climate commitments by incorporating it into national adaptation plans.** The incorporation of evidence-based, women-focused interventions such as the Graduation approach into national climate adaptation plans can help ensure that climate-adaptive programming includes the most marginalized populations, meets their multidimensional needs, and empowers the most vulnerable to build linked economic and climate resilience.

**2) Leverage existing national programs for greater reach and inclusion of Graduation programming.** The

IESS-Kairouan Graduation pilot leverages existing social registries from the national cash transfer program to identify target households. Levering existing programs enables Graduation implementers to identify households at the intersection of climate and socio-economic vulnerability and ensure that resources are appropriately funneled to those most marginalized, often remote communities that suffer recurring shocks.

**3) Promote inter-ministerial collaboration, which is essential to ensuring a holistic and sustainable approach to a country's social and environmental needs.** Effective coordination leverages the expertise and resources of multiple government ministries to collectively achieve shared goals. Graduation can complement and enhance the impact of existing investments from various ministries. In the IESS-Kairouan Graduation pilot in Tunisia, distinct ministries are collaborating to address household-level needs and vulnerabilities alongside infrastructural barriers faced by communities. This collaboration ensures that marginalized groups benefit from infrastructure improvements to roads, water access, and land rehabilitation, enabling them to overcome livelihood barriers and promoting their inclusion in regional and national value chains. Only through addressing these broader infrastructure barriers will initiatives like the Graduation approach be sustainable at scale. This requires appropriate management mechanisms to support communication and collaboration among all stakeholders. The IESS-Kairouan Graduation pilot is governed by a multi-stakeholder National Coordination Committee responsible for supervision of the project and integration of various sectors, supported by the Graduation Task Force that ensures coordination and collaboration on project activities.

**4) Align timing, sequencing, and service linkages throughout the design and implementation of the Graduation approach within a broader national program.** In addition to implementing a Graduation pilot in the same geographic area(s) as a national adaptation or infrastructure program, programming

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**There is a need to make sure ministries are combined in their approaches – we can no longer work in a parallel fashion as it is unfortunately too often the case.”**

Philippe Remy, Country Director, Near East, North Africa, Europe and Central Asia Division | IFAD

should be aligned to ensure that synergistic interventions are received at the appropriate time. For example, if the Graduation pilot is designed to improve participants' access to infrastructure interventions (climate-proofed roads, rainwater collection tanks, irrigation), these activities should be implemented on a timeline that aligns with the Graduation pilot. Similarly, the pilot should leverage existing national programs through service linkages, such as veterinary services for livestock, health insurance, and water access. Finally, it is important for stakeholders to consider how Graduation participants can “graduate out of” Graduation programming and “into” complementary, higher-order services and activities. These may include upskilling programs, microfinance institutions, value-chains, and insurance schemes that Graduated participants may access and utilize as they continue their trajectory out of poverty.

## Community & Local Economy

### 1) Align Graduation-supported livelihood activities with national and regional value chain priorities,

#### Kenya's Women's Economic Empowerment through Climate-Smart Agriculture Project

Promotes green and climate-resilient livelihoods for 2,400 Graduation participants in Kenya.

**Government & Policy** – The West Pokot County Government has developed two policies to address issues of climate mitigation and financing of climate change interventions.

**Household & Individual** - Women in extreme poverty receive climate-smart training in techniques to improve agricultural outputs in a changing farming environment, such as proper irrigation, planting drought tolerant crops, and moisture retention practices.

#### The Sahel Adaptive Social Protection Program

SASPP Integrates the Graduation approach into existing government systems to build climate resilience for households in extreme poverty in six countries.

**Government & Policy** – Graduation program integrated into government social protection interventions, including social registries, cash transfer programs, and climate early warning systems.

**Household & Individual** - Households are identified based on climate vulnerabilities and linked to shock-responsive social protection programs. Participants receive coaching and saving support to build coping mechanisms, and are encouraged to diversify livelihoods to be more climate resilient.

while supporting innovation through market systems development. Graduation programs should promote gender- and climate-sensitive livelihoods that support priority national value chains such as carpets, olive oil production, and prickly pear cactus in the case of Kairouan. Market assessments should identify livelihood opportunities that are appropriate for the target population, whether in cultivation and production or processing and packaging, as determined by market feasibility, interest and local skillsets, and climate resiliency. It may be necessary to supplement the most innovative livelihood activities with market systems development that enable Graduation participants to overcome barriers to market access, such as inadequate infrastructure and limited buyers. Linkages to broader infrastructure programs can help overcome such barriers to the success of innovative solutions.

**2) Utilize localized and representative market assessments to determine feasible livelihood opportunities at scale.** The Graduation approach requires localized market assessments, which can be a barrier for scaling up programming. To overcome this challenge, Graduation programs should conduct localized market assessments in a representative sample of geographies across the full target area with sufficient socioeconomic, geographic, and climatic diversity.

**3) Leverage the landscaping exercise to identify resource gaps in the local economy and potential linkages that would benefit Graduation participants.** The landscaping exercise identifies existing services that can support participants' inclusion into local economies as well as gaps and entry barriers. These include agriculture extension agents, veterinary services, adult literacy education, or healthcare. A Graduation program should establish successful linkages or create opportunities to fill these identified gaps, whether directly or through advocacy to local governments and other implementing organizations.

## Household & Individual

**1) Implement gender-sensitive adaptations beyond targeting women.** While centering women as Graduation participants is an integral step towards gender-transformative programming, gender-sensitive adaptations should be promoted throughout project activities and synergistically at all levels (household and individual, community and local economy, and government and policy) as highlighted by the GALS approach (see table).

**2) Incorporate climate-sensitive adaptations holistically throughout activities.** In addition to selecting climate-responsive livelihood activities, climate-sensitive adaptations can be incorporated into coaching, life skills, and technical training (disaster risk reduction activities, kitchen gardens

### Exemplary Climate resilience and women's empowerment adaptations in Graduation Programs

#### Government & Policy

[The Women's Economic Empowerment through ClimateSmart Agriculture Project](#) - Village Enterprise | Kenya

[The Sahel Adaptive Social Protection Program](#) - World Bank | Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal

[Climate Resilience Framework](#) | BRAC

#### Community & Local Economy

[Index-based Livestock Insurance \(IBLI\)](#) - International Livestock Research Institute - BOMA | Kenya

Market Systems Development (MSD) Approach - Livelihoods for Resilience - CARE | Ethiopia

Design programs to respond to environmental assessments - CONCERN

#### Household & Individual

[Poverty Mapping with government's climate vulnerability index](#) - BRAC | Bangladesh

Incorporate disaster management into coaching activities (contingency plans, shock management) - BRAC | Bangladesh

Climate sensitive training and preparedness to build resilience - Nobo Jatra / World Vision | Bangladesh





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