

Care as Climate Infrastructure: Strengthening Climate-Resilient and Inclusive Private Sector Development for Women-led MSMEs

Kore Global



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Care as Climate Infrastructure: Strengthening Climate-Resilient and Inclusive Private Sector Development for Women-led MSMEs



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Executive summary

Climate change is intensifying unpaid care demands while simultaneously weakening the systems, infrastructure, and services that support care provision, with significant implications for women-led micro, small, and medium enterprises (MSMEs). Although growing attention has been paid to the care–climate nexus, limited research has examined how these intersecting pressures affect women’s economic participation, enterprise resilience, and adaptive capacity. This report examines how climate change and care system constraints are shaping the experiences of women-led MSMEs and explores opportunities to advance more care-sensitive and climate-resilient approaches to private sector development.

The research adopted a mixed-methods design combining a literature review, an online survey of 23 care economy enterprises across Sub-Saharan Africa, Asia, and Latin America, and 13 key informant interviews with women-led enterprises, worker organisations, donors, and development actors. The report examines how climate-related shocks – including extreme heat, flooding, drought, and supply chain disruptions – are affecting enterprise operations, productivity, working conditions, and business continuity. It also explores how rising unpaid care demands, driven by climate-related illness, service disruption, resource scarcity, and household stress, constrain women entrepreneurs’ time, mobility, health, and economic opportunities.

Findings show that women-led MSMEs face intersecting physical, social, and institutional vulnerabilities that limit their ability to anticipate, adapt to, and recover from climate shocks. Enterprises report increased operating costs, workforce absenteeism, infrastructure damage, and declining customer purchasing power, while unpaid care responsibilities further reduce women’s available time, flexibility, and adaptive capacity. Through case studies and examples, the report explores how women workers and entrepreneurs are responding to these interrelated pressures, including through flexible work arrangements, localised service delivery models, collective support systems, and investments in climate-resilient infrastructure and technologies. It also examines the structural factors shaping women-led MSMEs’ adaptive capacity, as well as their investment and support needs.

The report concludes that care systems function as essential economic and climate infrastructure. It presents actionable recommendations for donors, governments, and investors to strengthen care systems, support women-led MSMEs’ adaptation and growth, and scale more inclusive, care-sensitive approaches to climate-resilient private sector development.

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Acronyms

DCED	Donor Committee for Enterprise Development
DFIs	Development finance institutions
GAC	Global Affairs Canada
GIZ	German Agency for International Cooperation
IDRC	International Development Research Centre
IDWF	International Domestic Workers Federation
IEG	Institute for Economic Justice
IFC	International Finance Corporation
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
ITUC	International Trade Union Confederation
LMICs	Low- and middle-income countries
MSMEs	Micro, small and medium enterprises
NDCs	Nationally Determined Contributions
SEWA	Self-Employed Women's Association
Sida	Swedish International Development Cooperation Agency
UNRISD	United Nations Research Institute for Social Development
WASH	Water, sanitation and hygiene
WIEGO	Women in Informal Employment: Globalizing and Organizing

1. Introduction

1.1 Research context and objectives

Climate change is increasingly recognised as a profound and far-reaching force reshaping care systems and care work globally. A growing body of research shows that climate-related shocks – such as heatwaves, droughts, floods, and wildfires – and environmental degradation are intensifying care needs while simultaneously undermining the infrastructure, services, and social systems that support care provision (MacGregor et al., 2022; UN Women, 2023; Climate and Care Initiative, 2024; Phalatse et al., 2024). These dynamics increase the time and physical labour required to secure household resources like food, water, and fuel, and to care for children, older persons, and those who are ill, injured, or displaced. Because women perform the majority of unpaid care work globally, they are disproportionately impacted by rising care demands, which constrain their time, mobility, economic opportunities, and wellbeing.

Despite growing attention to the care-climate nexus, its implications for the private sector – and for women-led micro, small, and medium enterprises (MSMEs) in particular – remain insufficiently explored. Existing research has largely focused on household- and community-level impacts, with less attention to how care- and climate-related pressures shape women's labour force participation, working conditions, and enterprise resilience. In particular, there is limited understanding of how women-led MSMEs, including self-employed and own-account workers, experience climate-related disruptions, navigate care constraints, and adapt to build resilience (see Box 1). Addressing this gap is critical given the central role women-led MSMEs play in

Box 1: Defining women-led micro, small and medium enterprises (MSMEs)

While exact definitions of micro, small and medium enterprises vary across institutions and countries, the most widely used criterion for defining MSMEs is the number of people they employ. Under the most commonly used thresholds, microenterprises employ fewer than 10 workers, small enterprises between 10 and 49 workers, and medium enterprises between 50 and 249 workers (IFC, 2012; ILO, 2019).

In this report, the term “women-led MSMEs” refers to enterprises owned, managed, or primarily operated by women across this full spectrum, in both the formal and informal economy. This includes self-employed and own-account workers who operate their own enterprises or engage independently in a trade but do not employ others, recognising that these women represent a significant proportion of women's employment in LMICs (de Haan, 2016).

MSMEs play a central role in supporting employment, livelihoods and economic inclusion globally, accounting for over two-thirds of total employment worldwide and up to 90% of jobs in many low-income countries (ILO, 2025a). Women are overrepresented among MSME owners and workers, particularly in the informal economy: 55% of working women globally are in informal employment, and nearly half (47%) of all informal workers are own-account workers (ILO, 2023a). As a result, the conditions affecting MSMEs have significant implications for women's economic empowerment, livelihood security, and adaptive capacity.

supporting local employment, livelihoods, service delivery, and climate adaptation, particularly in low- and middle-income countries (LMICs).

Women-led MSMEs operate at the intersection of climate change, care systems, and private sector development. Climate-related shocks disrupt operations, damage assets, and reduce productivity, while rising care demands constrain women workers' and entrepreneurs' time and capacity to sustain their businesses. These pressures are compounded by structural barriers – including limited access to finance, infrastructure, social protection, and care services – that shape their ability to anticipate, adapt to, and recover from climate risks. At the same time, women-led MSMEs – particularly those operating in care sectors such as childcare, domestic work, energy, and WASH (see Box 2) – play a critical role in delivering services that support household wellbeing and community resilience. They are therefore both disproportionately affected by care- and climate-related challenges and central actors in responding to them.

Box 2: Defining care sectors

Care sectors are commonly defined as including education, health, social work, and domestic work, which involve direct care provision (e.g. ILO, 2018).

This report adopts a broader care economy lens that includes both direct care provision and care-enabling infrastructure, products, and services. This encompasses sectors such as water, sanitation and hygiene (WASH), and energy, including clean cooking solutions, which are essential to household- and community-level care and directly shape the time and labour required for unpaid care work, particularly in LMICs.

This report examines how climate change and care system constraints are affecting women-led MSMEs, and the role of governments, donors, and private sector actors in advancing care-sensitive, climate-resilient solutions. Drawing on a desk review, enterprise survey, and key informant interviews, it analyses how climate change is reshaping enterprise operations, livelihoods, and working conditions, with particular attention to care-related pathways. Through case studies and examples, the report explores how women workers and entrepreneurs are responding to these interrelated pressures, the structural factors shaping their adaptive capacity, and their investment and support needs. It concludes with actionable recommendations for donors, governments, and investors to strengthen care systems, support women-led MSMEs' adaptation and growth, and scale more inclusive, care-sensitive approaches to climate-resilient private sector development.

1.2 Research methodology

This research adopted a mixed-methods design combining a literature review, enterprise survey, and key informant interviews. Together, these methods examined how climate change and related care pressures are affecting women-led MSMEs, including impacts on enterprise operations, working conditions, and adaptive capacity. The research also explored the strategies enterprises are employing to cope with and respond to these pressures, and the role of private sector actors in advancing care-sensitive, climate-resilient solutions.

A targeted literature review synthesised existing evidence on the intersections of care work, climate change, and private sector development. The review examined how climate-related shocks are reshaping care systems and care work, including the experiences of women balancing paid work and unpaid care amid rising

climate stress. It also analysed enterprise-level impacts on women-led MSMEs, including effects on productivity, working conditions, and business continuity, as well as emerging adaptation strategies, policy responses, and investment approaches.

An online survey was administered to MSMEs operating in the care economy, such as childcare and eldercare providers and enterprises supplying household energy and WASH solutions. The survey was distributed directly to enterprises listed in the [Care Economy Knowledge Hub](#) database and shared more broadly through professional networks and social media platforms, including LinkedIn and X (formerly Twitter). A total of 23 responses were received from enterprises across Sub-Saharan Africa, Asia, and Latin America (see Annex 1 for full sample characteristics). The survey examined climate- and care-related impacts on enterprise operations, working conditions, and service delivery; the strategies enterprises are employing to adapt; and their investment and support needs.

Key informant interviews were conducted to gather in-depth insights from stakeholders across the care, climate, and private sector development ecosystem. A total of 13 interviews were completed with representatives from care enterprises, women worker organisations and associations, and donor agencies and development finance institutions (DFIs). These interviews provided deeper insight into enterprise experiences, the structural factors shaping adaptive capacity, and priorities for strengthening care-sensitive, climate-resilient private sector development. A full list of interview participants is provided in Annex 2.

2. Why care matters for climate-resilient PSD

2.1 Climate change impacts on care systems and care provision

Climate change is increasing both the scale and complexity of care needs across households and communities, placing growing pressure on already fragile care systems. Climate-related shocks and stressors such as biodiversity loss, desertification, and resource scarcity, are increasing the incidence of malnutrition, waterborne diseases, heat stress, and chronic health conditions, particularly among children, older persons, and those with existing vulnerabilities (IPCC, 2022; UN Women, 2023). Climate-related disasters such as heatwaves, floods, storms, and wildfires also cause injury, trauma, and disability, creating new and often long-term care needs (Floro, 2023). Climate-induced migration and displacement further disrupt care arrangements, as families must reorganise caregiving amid instability, loss, and fractured support networks (Oxfam, 2019). Together, these impacts are increasing care needs while simultaneously weakening households' and communities' capacity to meet them (Phalatse et al., 2024; Grown & Martinez, 2025).

Climate change also directly and indirectly disrupts the infrastructure, services, and systems that enable care provision. Extreme weather events damage roads, health facilities, childcare centres, and schools, limiting access to essential care services when they are needed most (Climate and Care Initiative, 2024; UN Women, 2025a). Damage to water systems, electrical grids, food supplies, and fuel sources further increases the time, effort, and physical labour required to sustain daily life, intensifying unpaid care responsibilities within households (UN Women, 2023). At the same time, fiscal constraints are limiting governments' ability to maintain, repair, and strengthen care systems. In many African countries, public spending on debt servicing now exceeds expenditure on health and education, crowding out investment in care infrastructure and services and undermining climate resilience (Institute for Economic Justice, 2025; UNCTAD, 2025).

As formal care systems weaken, responsibility for absorbing these shocks shifts increasingly onto households, and disproportionately onto women and girls. Globally, women perform more than three-quarters of all unpaid care work, reflecting entrenched gender inequalities in the distribution of labour and resources (ILO, 2018). Climate change intensifies these inequalities by increasing unpaid care demands when public services fail or environmental conditions deteriorate. In drought-affected regions of Kenya and Somalia, women must travel longer distances to collect water and firewood, significantly extending their working day and intensifying physical and mental strain (Oxfam, 2019; Njenga, Gitau & Mendum, 2021). In India and Bangladesh, climate-related flooding and rising disease incidence have led to women spending an average of one additional hour per day on direct care work (Smith, Olosky & Grosman Fernández, 2021). Similarly, following climate-related disasters in Cambodia, women experienced substantial increases across different (non-cumulative) care domains – including childcare (26%), domestic work (20%), and adult care (19%) – particularly when male household members migrated in search of work (UN Women, 2025a).

These impacts are most severe for women facing intersecting forms of marginalisation, including poverty, displacement, disability, and insecure livelihoods. Climate-related shocks exacerbate resource scarcity in displacement settings, increasing women's exposure to sexual and gender-based violence during routine care tasks such as water and firewood collection (UNIDO & UN Women, 2013; UNHCR, 2016). For example, a study in Chad found that 42% of 673 refugee households reported assault, attempted rape, rape, or other forms of gender-based violence during firewood collection, as women travelled further into remote and insecure areas (Global Alliance for Clean Cookstoves, 2016). Environmental stress can also contribute to child marriage as a household coping strategy, shifting unpaid care responsibilities onto girls at an early age, with long-term implications for their rights and wellbeing (Pope et al., 2022).

2.2 Gendered redistribution of care and implications for women's economic empowerment

The intensification of unpaid care work due to climate change has significant implications for women's labour force participation and economic empowerment, although more robust, climate-specific evidence is needed to directly link care burdens to labour market outcomes. A well-established body of research shows that unpaid care responsibilities constrain women's participation in paid work, with an estimated 708 million women globally outside the labour force due to unpaid care work (ILO, 2024a; ILO, 2025b). Emerging evidence suggests that climate change compounds these dynamics by increasing the time and physical labour required to meet basic household needs, such as collecting water and fuel, caring for sick family members, and sustaining food production (MacGregor et al., 2022; UN Women, 2023). These additional demands can reduce the time, mobility, and energy available for income-generating activities, particularly in contexts where public services are weak or disrupted, thereby reinforcing existing patterns of labour force exclusion and constraining enterprise productivity.

The absence of affordable, quality care services and supportive care policies further constrains women's ability to sustain income-generating activities during climate-related disruptions. Previous DCED research has shown that limited access to childcare reduces women's ability to engage in paid work, access markets, and pursue training or enterprise development opportunities (Grantham & Somji, 2022). Climate change intensifies these constraints. In response, some women are forced to bring children to work, reduce working hours, or shift into home-based or informal activities that can be combined with care responsibilities, often at the expense of productivity, earnings, and business growth (Moussié & Alfors, 2018; Delecourt & Fitzpatrick, 2019). Gaps in maternity protection, healthcare, and family leave further reinforce these barriers, particularly for self-employed women and entrepreneurs who are typically excluded from formal employment protections (ILO, 2025b).

These pressures are especially acute for women in informal employment, whose livelihoods are often precarious and lack access to social protection and labour rights. Women are overrepresented in informal employment in LMICs, increasing their exposure to climate-related livelihood and income shocks (ILO, 2022a). Even short interruptions to paid work due to care responsibilities or climate-related disruptions can result in immediate income loss, asset depletion, rising debt, and longer-term economic insecurity (Valdivia, Ogando & Tulaphan, 2024; Nneli, 2025a). During climate-related shocks and disasters, women informal workers may also be excluded from emergency social protection, even as care demands increase due to rising illness, injury, and service disruptions. These risks are compounded by insecure working and living conditions, limited savings, and weak institutional support, reinforcing cycles of vulnerability (Ogando & Valdivia, 2025).

Climate change also affects the broader institutional and policy environments that shape women's economic opportunities. Climate shocks and temperature anomalies have been associated with slower progress in legal and policy reforms supporting gender equality, including parental leave, mobility, and employment protections (Behr et al., 2025). During periods of crisis, governments may prioritise immediate disaster response over longer-term investments in care systems and gender equality, delaying reforms that support women's economic participation and enterprise development (Floro, 2023). Despite these constraints, women continue to play central roles in sustaining household livelihoods, supporting community resilience, and driving local adaptation efforts, often without adequate recognition, resources, or compensation (Ngunjiri et al., 2025; UN Women, 2025).

Figure 1: Pathways linking climate change, care, and women's economic outcomes in MSMEs

Climate Shocks and Stressors	Care Impacts	Women's Economic and Enterprise Outcomes
• Extreme heat • Wildfires • Flooding, storms, and drought • Environmental degradation • Temperature anomalies	Increased Care Demands • Increased time and labour for water and fuel collection • Increased incidence of illness, injury, and disability • Disruptions to childcare (school / daycare closures) • Increased demand for care services • Disrupted care arrangements due to climate-induced migration and displacement	Labour and Economic Participation • Reduced working hours • Shift toward informal or home-based work • Exit from labour force or enterprise • Reduced access to markets, training, and opportunities
	Weakened Care Systems • Damage to care-supporting infrastructure (water energy, and transport systems) • Disrupted care services (healthcare, childcare, and education) • Redistribution of care to households (primarily absorbed by women and girls) • Reduced public investment and fiscal space	Enterprise Impacts • Business interruptions, asset loss, and damage • Increased operating costs • Reduced productivity and income • Reduced investment in adaptation
		Economic Wellbeing and Resilience • Income instability • Asset depletion and rising debt • Reduced capacity to adapt and recover • Increased vulnerability over time
Underlying Structural Constraints Shaping All Pathways • Limited access to finance • Weak infrastructure and services • Gaps in care systems and social protection • Gender norms and inequalities		

Taken together, these dynamics demonstrate how climate change reinforces structural care constraints that limit women's economic participation, productivity and wellbeing. By increasing unpaid care demands while weakening the systems that support care provision, climate change constrains women's ability to sustain and expand economic activities. Strengthening care systems, expanding social protection, and investing in supportive policy environments will therefore be critical to advancing gender equality and enabling inclusive, climate-resilient private sector development.

2.3 Gaps and opportunities: care as a missing link in climate-resilient private sector development

The exclusion of care from climate and private sector development

Despite growing recognition of the linkages between care and climate change, care remains largely absent from private sector development efforts and climate policies, strategies, and investments. This omission

represents both a critical gap and a missed opportunity. Care systems – such as childcare, healthcare, social protection, education, energy, and WASH – function as essential economic and climate infrastructure (Climate and Care Initiative, 2025), enabling labour force participation, supporting enterprise productivity, and strengthening the resilience of households, workers, and markets. When care needs are unmet or intensified by climate change, the effects ripple outward, constraining economic participation and undermining the effectiveness of climate and private sector development interventions.

This gap is evident in national climate strategies and policy frameworks. Existing climate finance mechanisms tend to prioritise physical infrastructure and emissions reduction while overlooking the social systems that sustain resilience, including care systems (Climate and Care Initiative, 2025). National mitigation and adaptation plans have also paid limited attention to care work and its role in enabling climate resilience and economic participation (MacGregor et al., 2022; ILO, 2024b). Analysis of 32 countries' Nationally Determined Contributions (NDCs) found that while about one-third acknowledge unpaid care work, references are largely limited to tasks such as water and fuel collection (UN Women, 2025b). Only four countries explicitly recognise increased caregiving needs resulting from climate-related illness or displacement, and just three acknowledge care work's broader role in supporting climate adaptation and resilience. As a result, climate strategies often overlook a fundamental constraint shaping women's ability to participate in and benefit from climate-related economic opportunities.

These omissions are also reflected in the design and implementation of climate programmes and interventions. While such initiatives have the potential to reduce and redistribute unpaid care work if designed with a care-sensitive lens, there are few examples of this in practice. Many mitigation and adaptation programmes fail to account for how care responsibilities shape women's ability to participate and benefit. For example, interventions in climate-smart agriculture, reforestation, and waste management often rely on women's unpaid environmental care work without recognising competing demands on their time and labour (Climate and Care Initiative, 2024). In some cases, climate-smart agricultural techniques have increased labour demands on women farmers already responsible for household food production and care, creating a "double day" of work that limits their ability to adopt new practices, improve productivity, or expand their enterprises (MacGregor et al., 2022). These dynamics can inadvertently increase women's workloads, reinforce gender inequalities, and undermine the sustainability and effectiveness of climate interventions.

Care is similarly overlooked in climate-resilient infrastructure investments, which are central to market access, enterprise development, and broader private sector growth. Investments in transport, energy, water, and urban infrastructure can alleviate women's unpaid care work and expand economic opportunities by reducing time and mobility constraints and improving access to services, markets, and employment (Grantham, 2022). However, when care needs are not considered, these investments may fail to benefit women caregivers or even create new barriers. For instance, transport systems designed without considering caregivers' mobility patterns may not accommodate the multi-stop trips associated with care work, increasing travel time and costs (Mirianco et al., 2025). Similarly, climate-related upgrades to market infrastructure can undermine women's livelihoods if they relocate markets further from residential areas or lack childcare and WASH facilities, making it harder for women to balance paid work and caregiving responsibilities.

These gaps are also evident in emerging Just Transition frameworks, which aim to ensure that the shift toward low-carbon economies is fair and inclusive. While current strategies emphasise protecting jobs in carbon-intensive sectors such as energy, manufacturing, and transport, they pay limited attention to care work and the needs and rights of care workers (Barca et al., 2025). Transition policies often prioritise reskilling

workers for green industries without corresponding investment in universal public care systems or recognising care jobs as essential components of low-carbon economies. At the same time, increases in unpaid care work due to climate change – sometimes described as a “climate time tax” – limit women’s ability to access green jobs, training, and entrepreneurship opportunities, constraining their participation in emerging low-carbon sectors and limiting the inclusiveness and effectiveness of private sector transitions (ILO, 2023b; Ngunjiri et al., 2025).

Together, these dynamics illustrate how climate and private sector development efforts continue to treat care as a peripheral social concern rather than foundational economic and climate infrastructure. This omission reduces the effectiveness of climate and private sector investments, and constrains women’s economic participation and inclusion.

Reframing care: From omission to opportunity

Care systems represent a critical and underutilised pathway to strengthening climate resilience, economic inclusion, and private sector performance. Investments in care services and infrastructure – such as childcare and healthcare provision, alongside energy, water, and transport systems that support care – directly enable women’s labour force participation and enterprise productivity (Value for Women, 2023; Kapadia, 2026). As climate impacts intensify care needs, ensuring their continuity becomes essential to maintaining workforce stability and economic output (Grown & Martinez, 2025). Evidence from Sub-Saharan Africa illustrates this potential: where care services have been disrupted by climate-related shocks, women entrepreneurs report significant losses in working time and productivity, whereas investments in care services and infrastructure have helped buffer these impacts and sustain enterprise performance (Ngunjiri et al., 2025). Innovations in care delivery, including digital and decentralised models, can further expand access, reduce costs, and minimise the time and carbon footprint associated with care-seeking, generating adaptation benefits that reinforce the economic returns to care investment (Ngunjiri et al., 2025). As climate impacts drive growing demand for care services, investment in care represents not only a high-potential financial opportunity, but also foundational infrastructure for climate resilience, generating economy-wide returns that extend well beyond the care sector itself (Grantham, Zelikson & Calder, 2024).

The care economy also offers a major and distinct opportunity for low-carbon job creation and just transition pathways. Unlike investments in physical infrastructure or emissions-reduction technologies, care jobs are inherently low-carbon: on average, they produce 26 times fewer greenhouse gas emissions than jobs in manufacturing and 1,500 times fewer than jobs in the fossil fuel sector (DCED, 2025; Barca et al., 2025). The ILO estimates that investment in care could generate nearly 300 million jobs globally by 2035, the majority held by women and in formal employment – contributing to increased tax revenues, reduced inequality, and more inclusive growth (ILO, 2022b). Care economy sectors including health, education, childcare, and domestic services – can absorb workers transitioning out of emission-intensive industries, providing an inclusive pathway to decent work, particularly for women who are often excluded from green industrial reskilling programmes (ILO, 2024b). In addition, care-enabling sectors such as energy and water play a critical supporting role by reducing unpaid care burdens and enabling participation in these sectors.

Failure to recognise and invest in care within climate-resilient private sector development therefore represents both a critical omission and a missed strategic opportunity. When care systems are weak or underfunded, climate impacts translate directly into reduced labour supply, lower enterprise productivity (Levy & Macías, 2025; Mirianco et al., 2025), and weakened market resilience (Climate and Care Initiative,

2024, 2025; IEJ, 2025), undermining the effectiveness and sustainability of broader adaptation and economic development efforts (Climate and Care Initiative, 2024, 2025; DCED, 2025). At the same time, underinvestment in care limits one of the most immediate and scalable pathways to support women's economic participation, strengthen MSME performance, and generate low-carbon employment. Integrating care into climate and private sector development strategies is therefore not only necessary to address gendered vulnerabilities, but also to unlock care's full potential as essential economic and climate infrastructure (Climate and Care Initiative, 2025).

3. How climate and care intersect for women-led MSMEs

3.1 Climate and care impacts for women-led MSMEs

Women-led MSMEs operate at the intersection of climate change, care systems, and private sector development. As entrepreneurs, employers, workers, and service providers, women are directly exposed to climate-related disruptions while also navigating unequal care responsibilities and gendered structural constraints that shape their ability to sustain their livelihoods and enterprises. Understanding these intersecting pressures is essential for assessing how climate and care-related risks affect women's economic participation, enterprise performance, and adaptive capacity.

Climate change is undermining the productivity, income stability, and long-term resilience of women-led MSMEs. Climate-related shocks damage productive assets, disrupt supply chains, and increase operating costs, weakening enterprise viability and growth (ILO, 2022a). These impacts are particularly severe for women-led MSMEs, which often operate on smaller margins, have fewer financial reserves, and face more limited access to recovery support. Women entrepreneurs are also concentrated in sectors such as agriculture, livestock, fisheries, trading, food processing, and care services, where activities often depend directly on environmental conditions and are highly exposed to climate variability and shocks (ILO, 2022a).

At the same time, rising care demands interact with these climate pressures to further constrain enterprise operations and adaptive capacity. Climate-related illness, service disruptions, and resource scarcity increase unpaid care responsibilities, reducing the time, labour, and financial resources women entrepreneurs can invest in their businesses. In turn, these pressures can limit productivity, delay recovery, and restrict opportunities for enterprise expansion, particularly in contexts where affordable care services and social protection are limited.

These dynamics are shaped by interconnected structural vulnerabilities that constrain women's ability to anticipate, adapt to, and recover from climate shocks. Women-led MSMEs face heightened risk as a result of three overlapping vulnerabilities: *physical vulnerability* at the place of work; *social vulnerability* shaped by gender inequalities and unequal care responsibilities; and *legal and institutional vulnerability* stemming from gaps in land ownership, labour protections, social protection, and care systems. These dimensions reinforce one another: climate hazards directly disrupt enterprise activities, while unequal care burdens, limited access to resources, and weak enabling environments constrain women's ability to respond, recover, and sustain their livelihoods over time.

Physical vulnerability at the place of work

Climate-related hazards pose risks to MSMEs broadly, but women-led enterprises face compounded physical vulnerabilities linked to the sectors and workplaces they disproportionately occupy. In LMICs, many women work in public spaces, informal markets, agricultural fields, or home-based settings, where they are directly exposed to floods, extreme heat, storms, and environmental degradation (ILO, 2022a).

Women working in public and open-air environments experience particularly high levels of exposure. This includes street vendors, market traders, and waste pickers who operate outdoors or from temporary structures, often without access to shade, clean water, or sanitation (Ogando & Valdivia, 2025). During extreme heat, outdoor workers face heightened risks of dehydration, heatstroke, and fatigue, yet many are forced to continue working because their income depends on daily sales and they receive no compensation if they stop (Nneli, 2025b). High temperatures can also spoil perishable goods, directly reducing earnings. Heavy rainfall and flash flooding further damage goods, disrupt access to markets, and increase exposure to disease-carrying bacteria, rodents, and insects (Dias et al., 2023). Research from WIEGO highlights the scale of this exposure: among nearly 100 waste pickers surveyed in Brazil, 91% reported experiencing climate-related events in the past year, most commonly heatwaves (85%) and, to a lesser extent, flash flooding (39%) (Dias et al., 2023).

Indoor workers, including home-based producers, domestic workers, and women employed in sectors such as garment manufacturing, also face significant climate-related risks. In workplaces and homes lacking adequate ventilation, safe drinking water, sanitation, and cooling, rising temperatures can make working conditions unsafe and, at times, unbearable. Extreme heat, water shortages, and flooding have been linked to increased absenteeism and reduced productivity, as workers cope with heat exhaustion, dehydration, illness, and increased care responsibilities (IDWF, 2025; Levy & Macias, 2025). For workers whose income depends on daily attendance or output, these disruptions translate directly into lost earnings. Women often move between income-generating work and unpaid care tasks throughout the day, extending their exposure to heat and limiting opportunities for rest and recovery (RISE, 2025). Prolonged heat exposure also increases risks of reproductive health complications, particularly in settings with inadequate WASH facilities (Levy & Macias, 2025; The Resilience Fund for Women, 2025). Home-based workers face especially high risks, as many operate in overcrowded, poorly ventilated dwellings that trap heat, prolonging exposure and compounding health risks while undermining productivity, earnings, and enterprise viability (Valdivia et al., 2023).

For home-based workers, the overlap between workplace and household care responsibilities creates additional constraints. While home-based work can provide flexibility, competing care demands often limit women's ability to dedicate sustained, uninterrupted time to income-generating activities. Research with more than 200 home-based workers living in slums and informal settlements in Bangladesh, India, and Nepal illustrates these dynamics: 60% of respondents reported that their unpaid care work had increased by more than two hours per day due to climate change, driven by caring for sick household members and the additional time required to secure water and manage food supplies (HomeNet South Asia, 2022). These increased care demands lead to more frequent interruptions, reducing productivity and income.

These risks are further compounded by inadequate access to climate-resilient infrastructure. Limited access to secure housing, cooling, drainage, and protective workspaces increases exposure to heat, flooding, and other climate hazards, while raising coping costs and reducing productivity (Valdivia et al., 2025). At the same time, many women-led MSMEs – particularly those operating in the informal economy – lack the financial resources to invest in protective infrastructure or workplace improvements, reinforcing their long-term vulnerability to climate shocks (Jenkins & Kalsi, 2025).

Social vulnerability shaped by gender inequality and care responsibilities

Gender inequalities and unequal care responsibilities significantly constrain women-led MSMEs' ability to adapt to climate risks. As climate change increases unpaid care demands, women face difficult trade-offs between caregiving and income generation. Research by WIEGO involving more than 1,000 home-based workers and street vendors in Bangkok found that 77% of home-based workers and 66% of street vendors reported increased caregiving responsibilities during periods of extreme heat, including caring for children, older persons, and sick family members (Valdivia et al., 2025). These expanded care demands reduce women's available working time, limit productivity, and constrain enterprise growth. As one home-based garment producer explained:

"My husband has partial paralysis. During the hot season, his condition worsens. He's a stroke patient, so I have to give him water, massage him, and care for him much more. Meanwhile, I still have to do my own work, which decreases because I must take care of him." (Female, home-based garment producer). (Valdivia et al., 2025, p. 12)

These intersecting care and climate pressures translate directly into economic losses. In the same WIEGO study, workers reported reduced sales and productivity, and 75% of home-based workers lost at least one day of work per month due to their own or a family member's heat-related illness (Valdivia et al., 2025).

Care responsibilities also limit women's ability to adjust their working hours to cope with extreme heat. While some men may be able to shift work to cooler periods of the day, women with caregiving responsibilities – particularly those with young children – often have less flexibility to do so. Interviews with street traders in Ghana and South Africa found that women without access to childcare were unable to take advantage of safer and more productive early morning or evening hours, as these were peak times for caregiving (Alfers, 2016). Similar patterns have been observed in India. In Ahmedabad's textile markets, workers who pack and transport garments often continue working during peak afternoon heat, as this is when work is available. For women, however, this exposure is compounded by caregiving responsibilities: unable to forgo income or access childcare, many bring their children with them, increasing heat-related risks for both themselves and their dependents (Climate Resilience Center, 2025).

Limited access to climate information, training, and early warning systems further constrains women's adaptive capacity. Gender gaps in access to mobile phones, digital technologies, education, and professional networks – combined with time and mobility constraints linked to care responsibilities, and gendered social norms – reduce women's access to timely and actionable climate information (Amaratunga, 2022; Pudmenzky et al., 2022). In Bangkok, fewer than half of women workers surveyed (43%) reported receiving timely heat warnings, despite the availability of city-level alert systems delivered via smartphone applications and online messaging (Ogando & Valdivia, 2025). Instead, many relied on informal or delayed information sources, such as television, radio, and personal networks such as family and neighbours, limiting their ability to adjust work schedules, protect their health, or safeguard business assets.

Climate-related migration and livelihood disruption can further intensify women's care and economic burdens. In many contexts, men migrate in search of alternative income when climate shocks undermine local livelihoods, while women remain at home due to social norms and caregiving responsibilities (Livingstone et al., 2021). Research with 1,143 SEWA members in Uttarakhand found that male out-migration, driven in part by climate-related livelihood challenges, has significantly increased women's unpaid care work alongside their paid and agricultural labour, increasing total workloads and constraining economic

opportunities (Jenkins & Kalsi, 2025). For women workers, this additional caregiving is on top of their own paid work responsibilities, and may lead to chronic stress, physical and mental health challenges, and eventual burnout (Oxfam, 2019; The Resilience Fund for Women, 2025).

Climate change is also associated with increased risks of gender-based violence, further undermining women's safety and economic participation. Climate-related economic stress, displacement, and resource scarcity have been linked to increased rates of domestic violence, harassment, and other forms of gender-based violence (van Daalen et al., 2022). For example, studies in Cambodia and Vietnam found that rising temperatures and climate-related financial pressures were associated with increased domestic violence among women workers in garment supply chains (The Resilience Fund for Women, 2025). Beyond its human rights implications, exposure to violence can limit women's mobility and physical ability to work, reducing productivity and undermining their capacity to sustain their livelihoods and enterprises.

Legal and institutional vulnerability

Gaps in labour rights, social protection, and care-related legal protections are a central dimension of women-led MSMEs' vulnerability to climate change. Many women entrepreneurs – particularly those who are self-employed or operating informally – lack access to maternity protection, healthcare coverage, childcare support, and parental or family care leave (Moussié & Alfors, 2018; Grantham & Somji, 2022). Even among formally self-employed women, access to such protections remains limited: globally, only 13.8% of self-employed women live in countries that provide mandatory maternity leave coverage in the form of cash benefits (ILO, 2022b). These gaps limit women's ability to sustain enterprise activities during climate-related disruptions and increase their exposure to income loss and economic insecurity (ILO, 2025b).

Legal and regulatory barriers also constrain women entrepreneurs' access to finance, insurance, and enterprise support programmes needed to strengthen climate resilience. Women-led MSMEs often face restrictive collateral requirements, complex business registration processes linked to lack of identification documents, and unequal rights to own, inherit, and control land and property, which limit their eligibility for formal credit, insurance, and recovery financing (GEM, 2022; UN Women, 2023). Without secure land or property rights, many women are unable to meet collateral requirements, restricting their ability to invest in climate-resilient infrastructure, diversify income sources, or recover from climate-related losses.

Informality further intensifies these vulnerabilities. Women-led MSMEs are disproportionately concentrated in the informal economy, where enterprises often operate without formal legal recognition or access to government support programmes (ILO, 2022a). Informal enterprises are less likely to qualify for recovery grants, subsidised credit, or disaster relief following climate-related shocks, and are typically excluded from contributory social protection schemes such as unemployment insurance, sickness benefits, and pensions (Oates & Sudmant, 2024). As a result, even short disruptions caused by climate impacts or increased care responsibilities can result in immediate income loss, rising debt, and long-term economic insecurity (Valdivia, Ogando & Tulaphan, 2024; Nneli, 2025a).

These constraints are further reinforced by women's limited voice and representation within formal decision-making and governance systems. Exclusion from policy, planning, and institutional processes limits women's ability to shape the design and delivery of climate information, services, and policies, reducing their relevance to women's livelihoods and care responsibilities. This undermines the effectiveness and uptake of climate interventions, particularly for women-led enterprises.

Together, these interrelated physical, social, and legal and institutional barriers highlight the unique vulnerability of women-led MSMEs to care- and climate-related risks. Addressing these structural constraints will be critical to strengthening their adaptive capacity, enterprise resilience, and long-term economic security.

3.2 Climate and care impacts for care economy enterprises

While this report focuses broadly on women-led MSMEs, this section zooms in on care economy enterprises due to their unique position at the intersection of care provision and climate adaptation. These enterprises not only experience climate-related disruptions but also deliver products and services that help households cope with rising care demands. This includes enterprises providing both direct care provision (e.g. childcare, eldercare, healthcare) and care-enabling products, services, and infrastructure (e.g. clean cooking and WASH systems), which reduce the time and labour required for unpaid care.

Care economy enterprises face many of the same climate-related risks as other MSMEs, but their role within care systems creates distinct pressures. In addition to managing disruptions to their own operations, they must respond to increased demand for care services and labour-saving products during periods of climate stress. This dual role generates additional operational strain while also positioning care enterprises as essential actors in climate adaptation and resilience.

To better understand these dynamics, we conducted an online survey of 23 care economy enterprises across Sub-Saharan Africa, Asia, and Latin America. The survey examined climate-related impacts on enterprise operations, service delivery, working conditions, and financial stability, as well as the adaptation strategies enterprises are employing and their investment and support needs. The sample consisted primarily of women-led enterprises, with 65% led exclusively by women and an additional 22% jointly led by women and men, and included micro (39%), small (22%), medium (26%), and large (13%) enterprises. Enterprises operated across multiple care economy sectors, with the largest share in childcare (35%), followed by clean cooking and household energy, and water access solutions. Most enterprises (61%) served both urban and rural communities, highlighting their role in supporting climate resilience across diverse settings.

Physical and operational disruptions

Survey findings show that climate change is no longer a distant threat for care enterprises but a current operational reality. Nearly all surveyed enterprises (90%) reported that climate-related events have affected their operations, with 59% describing moderate to severe impacts on business costs and customer demand.

Damage to physical infrastructure and service disruptions were among the most immediate impacts, affecting nearly one-third (32%) of respondents. Extreme weather events such as floods and storms damaged facilities, destroyed distribution infrastructure, and disrupted transport routes needed to reach clients. For example, [Komodo Water](#) in Indonesia reported that heavy rains washed away mountain water pipelines and made inter-island distribution unsafe, effectively paralysing their supply chain. [AgeWatch Africa](#) in Kenya noted that storm damage to electrical infrastructure left their eldercare centre without grid power for six weeks. In Thailand, [Kiidu](#) reported that extreme heat overwhelmed cooling systems, disrupting caregiver training and service provision.

Climate shocks are also driving up the cost of delivering care services, with half of respondents (50%) reporting increased operating costs. These increases were driven by supply chain disruptions (reported by

46% of enterprises), the need for costly coping measures – such as purchasing water at premium prices during droughts – and, for some enterprises (9%), rising insurance premiums. Enterprises such as [Solar Sister](#), which operates in Nigeria, Kenya, and Tanzania, reported significant income losses when flooding prevented last-mile entrepreneurs from delivering clean energy products. The increasing frequency and unpredictability of climate shocks further complicate financial planning, making it difficult for care enterprises to manage cash flow, invest in growth, or maintain reliable service provision.

Workforce challenges

Beyond infrastructure and operational disruptions, climate change is also reshaping the availability, working conditions, and wellbeing of the care workforce. Nearly half of surveyed enterprises (46%) reported increased staff absenteeism due to climate-related events. Absenteeism is driven by illness, transport disruptions, and physical and emotional strain as workers perform their duties under increasingly difficult conditions. In Thailand, domestic workers and nannies reported heat exhaustion, dehydration, and service disruptions when extreme heat made it unsafe to travel or work. In Kenya, caregivers experienced burnout as they provided additional support to vulnerable clients during floods and droughts, even as their own households were affected.

These workforce impacts are strongly gendered, reflecting women's dual roles in paid and unpaid care.

Survey findings show that 79% of enterprises reported that climate events had increased their workers' unpaid care responsibilities to a moderate or large extent. Follow-up interviews confirmed that women – who comprise the majority of the care workforce – often assume additional caregiving roles within their households during climate shocks, reducing their availability for paid work. During an interview, Solar Sister's Grants Manager, Aidah Waweru, and Strategic Partnerships and Programs Development Lead, Hanatu Onogu, explained that during erratic rainy seasons, women entrepreneurs must divert time and financial resources from their businesses to intensive agricultural work to ensure household food security. Similarly, Founder and CEO of AgeWatch Africa, Richard Waindi, explained that during droughts, female staff must travel longer distances to collect water and firewood for their own families before reporting to work. These competing demands reduce workforce availability, increase fatigue and burnout, and constrain enterprises' ability to deliver consistent and reliable care services.

Increased demand and pressure on care enterprises

These workforce constraints occur alongside rising demand for care services, further intensifying pressure on enterprise operations. Over a quarter (27%) of surveyed enterprises reported increased demand during climate events, driven by heightened community vulnerability and household needs for care services. For example, AgeWatch Africa Foundation reported that floods displace elderly clients and increase disease risks, triggering greater demand for intensive care and nutritional support. In Thailand, Kiidu, a domestic worker platform, noted that extreme heat limits children's ability to safely engage in outdoor activities, increasing reliance on professional caregivers during heatwaves. However, climate shocks also weaken the economic stability of care enterprises' client base. During an interview, Komodo Water's Founder and CEO, Shana Fatina, explained that extreme weather – such as excessive rainfall destroying coffee harvests – reduces household incomes and limits customers' ability to pay for essential services. Care enterprises must therefore manage rising demand while simultaneously facing logistical disruptions and declining customer purchasing power.

At the same time, climate volatility is accelerating demand for care-enabling infrastructure and technologies, particularly in the energy and water sectors. As climate impacts increase the time and labour required to meet basic household needs, women are seeking products and services that reduce these pressures. Solar Sister reported that heavy rainfall makes traditional open-fire cooking unsafe or impractical, increasing demand for clean cookstoves that allow households to cook indoors. Grid instability caused by storms has also increased demand for solar lighting and charging solutions. Similarly, Komodo Water noted that while heavy rainfall can temporarily reduce demand due to rainwater harvesting, prolonged drought and saltwater intrusion significantly increase the community's reliance on reliable, safe water distribution services.

Together, these dynamics place care enterprises under dual and reinforcing pressures: climate change is increasing demand for their services while simultaneously undermining their ability to deliver them. Rising operational costs, workforce constraints, infrastructure disruptions, and declining customer purchasing power limit enterprise capacity precisely when care needs are intensifying. This creates a vicious cycle in which climate-related health risks, resource scarcity, and livelihood shocks increase dependence on care services, even as the capacity of care enterprises to meet these needs is most constrained (Grown & Martinez, 2025).

At the same time, these findings underscore the central role care economy enterprises play in supporting household and community climate resilience. By maintaining access to childcare, healthcare, water, and energy services – and by providing technologies that reduce unpaid care work – care enterprises help absorb shocks that would otherwise increase the burden on households, particularly women. Unlocking their full potential as climate resilience actors will require a fundamental shift in policy and investment approaches to recognise care as essential economic and climate infrastructure within broader MSME adaptation strategies.

4. How women-led MSMEs are adapting to climate and care challenges

Building on insights from care economy enterprises, this section returns to the broader ecosystem of women-led MSMEs to examine how they are adapting to climate and care-related pressures.

4.1 Women-led MSME adaptation and coping strategies

Women-led MSMEs across sectors are actively adapting to sustain their enterprises in the face of escalating climate and care pressures. In the absence of adequate public support, climate finance, and social protection, many women entrepreneurs and workers are developing their own responses to manage disruptions and cope with rising operational and unpaid care demands. These responses span a continuum: from individual coping strategies that support short-term survival but often increase precarity, to enterprise-level adjustments that strengthen resilience, to collective approaches that offer more sustainable solutions but remain limited in scale and support.

This section examines adaptation across three levels – individual, enterprise, and collective – highlighting both the agency of women-led MSMEs and the structural constraints shaping their adaptive capacity. While women entrepreneurs are actively adapting, their efforts remain constrained by gaps in finance, infrastructure, care systems, and enabling policies. Strengthening the climate and care resilience of women-led MSMEs will therefore require greater investment in enterprise support and care-enabling systems that address these underlying barriers.

Individual behavioural and financial coping mechanisms

For smaller enterprises – particularly micro-enterprises and own-account workers – adaptation strategies are often individual, informal, and precarious. Women adjust their schedules where possible to avoid extreme heat, reduce working hours, rely on informal support networks, or bring their children to work when care services are disrupted (Dias et al., 2023; Valdivia et al., 2025). In Bangkok, Thailand, 95% of street vendors and 88% of home-based workers surveyed by WIEGO reported incurring additional out-of-pocket expenses to stay cool and continue working, including purchasing fans, umbrellas, cooling products, and additional drinking water (Valdivia et al., 2025). These measures are typically self-financed, ad hoc, and insufficient to fully mitigate climate-related health and productivity risks.

Women also adopt financial coping strategies to manage income loss and household instability during climate shocks. Research by SEWA Bharat and Social Development Direct involving more than 1,100 women in India's informal economy found that 46% of women have taken out a loan in the past five years due to climate change (Jenkins & Kalsi, 2025). Many rely on informal lenders due to their accessibility, despite higher interest rates, while others reduce spending on food and basic needs or sell productive assets. The study

found that 34% of respondents had sold assets – most commonly livestock (81%) or jewellery (56%) – often in response to climate-related income loss. As one agricultural worker in Jharkhand explained:

“A member of my family was unwell. If the crop had been good, we would have used the profits from the crop for their healthcare, but there was no crop yield so we had to sell a goat.”(Jenkins & Kalsi, 2025, p. 74)

Similarly, our survey and interview findings from Solar Sister show that women entrepreneurs may divert time, labour, and financial resources toward subsistence farming during periods of erratic weather to maintain household food security, reducing their capacity to sustain and grow their enterprises. While these strategies are essential for short-term survival, they can undermine longer-term enterprise viability by reducing investment, eroding assets, and contributing to the gradual de-capitalisation of women-led businesses.

Enterprise-level operational and business model adaptations

Women-led MSMEs are adapting their operations and business models to reduce climate-related disruptions and maintain service continuity. Supply chain disruption was identified as a major impact by 46% of surveyed care enterprises, and 41% reported diversifying suppliers to reduce risk. For example, Solar Sister employs a multi-supplier strategy across Kenya and Nigeria, maintaining contracts with multiple vendors for clean cookstoves and lighting so that if one supplier is affected by floods or transport disruption, others can continue to supply products. Enterprises are also modifying service delivery models to reduce climate exposure. In Thailand, Kiidu has localised its caregiver matching system, prioritising placements within the same neighbourhood to reduce travel time, limit exposure to extreme heat and pollution, and improve service reliability.

Enterprises are also investing in climate-resilient workplace infrastructure, technologies, and energy systems to protect assets and sustain operations. However, these investments are often incremental due to financial constraints. A total of 23% of surveyed care enterprises have invested in backup power or infrastructure upgrades. For example, AgeWatch Africa used solar lanterns to maintain operations when storm damage cut off grid electricity for six weeks. Similarly, Komodo Water re-engineered its water collection system, shifting from direct stream extraction to runoff channels and reinforced storage tanks designed to withstand flooding and prevent damage to costly pipelines.

Care-responsive workforce adaptations have emerged as another key strategy, enabling enterprises to maintain workforce stability while supporting employees facing increased care responsibilities. More than half (57%) of surveyed care enterprises introduced flexible or remote work arrangements during periods of extreme weather. For example, AgeWatch Africa Foundation implemented a job-sharing model that reduced shift lengths, allowing caregivers more time to secure water, fuel, and care for family members during drought. Komodo Water also allows staff to bring children to work and field sites, helping prevent childcare disruptions from interrupting operations. In Ahmedabad, India, the Abodana handicraft cooperative has introduced flexible workplace arrangements in response to rising climate-related care demands (SEWA Cooperative Foundation & Urban Design Square, 2025). During peak summer months and monsoon seasons, artisans can take orders home or adjust their hours to balance paid work and caregiving, enabling them to sustain their income while strengthening worker wellbeing, retention, and a supportive work environment.

Some enterprises are integrating flexibility directly into their service delivery models. Kiidu has introduced flexible scheduling, localised caregiver placements to reduce travel during extreme heat and flooding, and climate-awareness training to strengthen caregiver resilience. In the survey, Kiidu noted, *“Climate change is increasingly impacting our operations and workforce through rising temperatures, floods, and air pollution... In response, we are implementing various measures, including flexible work arrangements during extreme weather and promoting localised caregiver-family matching.”* These measures reduce climate exposure, support workforce stability, and enable care enterprises to maintain essential services under increasingly volatile climate conditions.

Collective adaptation strategies and shared support systems

Collective action and shared support systems play a critical role in strengthening the climate resilience of women-led MSMEs by enabling enterprises and workers to access resources, information, and infrastructure that would be difficult to secure individually. Worker organisations, employers’ organisations, cooperatives, social networks, and public information systems function as essential forms of collective adaptation infrastructure, helping enterprises anticipate risks, coordinate responses, sustain operations during climate disruptions, and access training and other resilience-building support (Dias et al., 2023).

A key function of these systems is facilitating access to climate information and early warning systems. Timely and reliable weather information enables enterprises to adjust operations, protect workers, and reduce losses. Among surveyed care enterprises, 32% use communication tools to access weather alerts, although the sophistication of these systems varies. Some rely on digital tools; for example, Komodo Water uses wave-tracking applications and weather data to schedule engineering work during safe operating windows, reducing risks to staff and equipment. Others depend on public weather broadcasts, peer networks, and community-based information sharing. Kiidu also identified the development of its own in-app alert system to notify caregivers of extreme weather risks as a priority investment.

Worker organisations and networks play a particularly important role in ensuring climate information reaches informal workers and smaller enterprises. In 2025, HomeNet Thailand partnered with Workplace Health Without Borders to develop practical heat-health guidelines tailored to informal workers (Ogando & Valdivia, 2025). Their effectiveness depended on HomeNet Thailand’s grassroots membership model, which enabled the organisation to distribute the materials through regional member leaders and peer networks. This approach strengthened workers’ ability to recognise heat-related risks and adopt protective measures. However, workers and enterprises outside such networks often remain excluded, highlighting the importance of investing in inclusive, worker-centred climate information systems.

Women’s business cooperatives and associations are also investing in shared infrastructure and collective risk management strategies to strengthen enterprise stability and reduce care and climate vulnerability. Cooperatives and worker organisations have been experimenting with climate insurance schemes, risk funds, improved shared workplace infrastructure, and engagement in municipal climate planning processes. For example, in India, Mahila Housing Trust supported women’s collectives to implement community-level rainwater harvesting and well recharge systems, improving water security for households and home-based enterprises while reducing time spent collecting water during drought (Mahila Housing Trust, WIEGO & City Collab, 2025). These collective investments strengthened enterprise continuity, protected livelihoods, and reduced unpaid care burdens. Similarly, waste picker cooperatives have invested in shared storage facilities to protect materials from climate damage and prevent income losses during extreme weather events (Dias et

al., 2023). These collective approaches help distribute risk, lower individual adaptation costs, and strengthen resilience more effectively than isolated enterprise responses.

These findings highlight both the agency and the constraints shaping women-led MSME adaptation. Women entrepreneurs and workers are actively developing innovative responses to sustain their enterprises and livelihoods, yet most strategies remain reactive, uneven, and constrained by limited access to finance, infrastructure, and collective support systems. Individual coping mechanisms may help manage immediate shocks but often increase financial strain and undermine long-term enterprise viability. While enterprise-level and collective adaptations offer more effective and sustainable pathways, their scale and impact remain limited without sustained investment and enabling policy environments. Strengthening the climate resilience of women-led MSMEs will therefore require targeted financial, technical, and institutional support to expand access to resilient infrastructure, reinforce collective adaptation systems, and address the structural barriers constraining their adaptive capacity.

4.2 Investment and support needs

The ability of women-led MSMEs to respond effectively to care and climate risks is constrained by limited access to finance, technical support, and enabling policy environments. Despite demonstrating significant initiative and adaptive capacity, many enterprises lack the resources needed to implement sustained and effective adaptation measures. Our survey findings show that 64% of care enterprises reported being only slightly prepared – or not prepared at all – to cope with climate shocks. Evidence from WIEGO similarly highlights gaps in external support: 30% of waste pickers surveyed in Brazil reported receiving no assistance from government, civil society, or private sector actors, while those who did described support as fragmented and inconsistent (Dias et al., 2023). Together, these findings underscore the urgent need for more coordinated investment across financial, technical, and policy domains to strengthen the adaptive capacity and long-term resilience of women-led MSMEs.

Financial support needs

Climate shocks disrupt revenues and increase financial instability for women-led MSMEs. These impacts are closely intertwined with care responsibilities, as income disruptions are often compounded by rising household care costs – including healthcare, water, and childcare – reducing available capital for enterprise recovery and investment.

Limited access to appropriate and affordable finance remains one of the most significant constraints facing women-led MSMEs, restricting their ability to invest in adaptation measures, maintain operations during climate disruptions, and grow over time. In our survey of case enterprises, respondents emphasised the importance of flexible and predictable funding, with 92% identifying long-term grant financing as the most effective form of support. For example, Solar Sister highlighted the need for predictable, long-term financing embedded within 10- to 30-year strategies, rather than short-term, project-based funding cycles that do not align with the time horizons required for climate adaptation and enterprise development. Previous research by IDRC and Kore Global similarly underscores the importance of blended financing approaches – including grants, concessional loans, and catalytic capital – to support business continuity, adaptation investments, and sustainable growth for care enterprises (Grantham, Zelikson & Calder, 2024).

Women-led MSMEs have also emphasised the importance of climate-responsive financing models that reflect the realities of operating under increasing climate uncertainty. For example, Komodo Water highlighted the need for investors to incorporate climate risk into financing decisions, treating disruptions as expected operating conditions rather than exceptional events. Such approaches can help ensure financing structures are flexible enough to support enterprises facing recurrent climate shocks.

In addition to enterprise-level finance, investment in climate-resilient public and care-related infrastructure is critical to enabling women-led MSMEs to operate safely and effectively. Women-led enterprises and worker organisations have highlighted the need for reliable water supply, drainage systems, shaded and ventilated market spaces, and safe rest areas, which are essential for protecting workers' health and maintaining productivity but remain unaffordable without public or external investment (Dias et al., 2023; Jenkins & Kalsi, 2025). Investment in climate-resilient care infrastructure – including WASH services, community health systems, and childcare facilities – is equally essential, as these services enable women's economic participation, household wellbeing, and enterprise continuity (Valdivia et al., 2025). Strengthening care and public infrastructure can reduce the drudgery of unpaid care work, protect household wellbeing during climate shocks, and enable women entrepreneurs to sustain and grow their businesses. Delivering these investments will require close collaboration between governments, investors, and women-led enterprises to ensure solutions reflect local climate risks, sector needs, and the realities of women's work and care responsibilities.

Technical and infrastructure support needs

In addition to finance, women-led MSMEs face infrastructure-related challenges, including limited access to water, cooling systems, and safe working environments. These infrastructure needs are closely linked to care responsibilities. For example, lack of water, cooling, or childcare facilities increases both operational risks and unpaid care burdens, limiting women's ability to sustain enterprise activities during climate shocks. This affects productivity, worker health, and business continuity.

To address these challenges, women-led MSMEs require technical and operational support to upgrade workplace infrastructure and equipment to sustain operations under increasingly volatile climate conditions. These needs are highly context- and sector-specific but commonly include reliable water supply, drainage, ventilation, cooling, and safe storage. For example, survey data from AgeWatch Africa identified the need for a solar-powered borehole drilled to 100–150 metres to ensure a reliable, year-round water supply for a care centre and the surrounding community, highlighting the importance of climate-resilient water systems for service continuity. Waste picker organisations have similarly identified the need for improved drainage, flood-resistant storage, ventilation, and safer recycling equipment to reduce occupational risks, protect assets, and prevent productivity losses (Dias et al., 2023; Ogando & Valdivia, 2025). These upgrades are essential to protecting workers' health and enabling enterprises to continue operating during climate shocks.

Beyond public policy and financing mechanisms, intermediary actors also play a key role. Employers' organisations, including business and professional associations, can strengthen women entrepreneurs' resilience to climate change by providing training, facilitating access to information and networks, and supporting the adoption of climate-resilient and low-carbon business practices, while also helping address care-related constraints that shape women's participation and business continuity. Evidence from Tunisia illustrates this role: the *Chambre Nationale des Femmes Chefs d'Entreprises* (CNFCE), with ILO support, has delivered training on green business practices, developed practical tools such as a Green Business Guide, and

engaged in policy advocacy to strengthen the enabling environment for women entrepreneurs (ILO, 2025c; forthcoming). Such organisations can help bridge the gap between national strategies and enterprise-level implementation, while amplifying women entrepreneurs' voices in just transition processes.

Women-led MSMEs also require business development and technical assistance to strengthen operational capacity, improve productivity, and adapt their business models to changing climate conditions. As outlined earlier in [section 3.1](#), many women entrepreneurs face structural barriers to accessing training, mentoring, and business networks, limiting their ability to strengthen financial management, adopt new technologies, and implement climate-resilient practices. Previous research with 165 care enterprises similarly highlighted the need for technical support to strengthen service delivery systems, workforce management, and operational planning, and to design scalable and financially sustainable models that balance social and commercial objectives (Kore Global et al., 2024). More broadly, targeted technical assistance – including mentoring, incubation, and enterprise development support – can help women-led MSMEs improve operational efficiency, adapt to climate-related disruptions, and sustain their enterprises in increasingly climate-affected markets.

Access to climate information, education, and early warning systems is also a critical technical support need. Women-led enterprises and worker organisations emphasised the importance of timely and accessible climate information, combined with training on emergency response, occupational safety, and adaptation strategies (Dias et al., 2023; Valdivia et al., 2025). For example, Thailand-based childcare and eldercare provider Kiidu identified the need for automated in-app weather alerts to notify caregivers of climate risks in real time, enabling enterprises and workers to anticipate disruptions and take protective action. Ensuring climate information is delivered through accessible and diverse communication channels – including mobile platforms, social media, radio, and community networks – is essential to reaching women entrepreneurs with varying levels of digital access and literacy (Rubinyi et al., 2025).

Policy and enabling environment support needs

Beyond financial and technical support, women-led MSMEs require stronger and more inclusive policy and regulatory environments to enable them to adapt, formalise, and grow under climate stress. Expanding access to social protection is a critical priority. In many countries, domestic workers and other informal care workers remain excluded from national social protection systems, leaving them exposed to income loss and health risks during climate-related disruptions (Valdivia, Ogando & Tulaphan, 2024). For example, AgeWatch Africa similarly highlighted the need for reforms to Kenya's social protection system, including lowering eligibility thresholds and increasing benefit levels, to better support climate-vulnerable populations. More broadly, women workers' organisations have emphasised the need to strengthen social protection floors – including income support, health coverage, and emergency assistance – to enable workers and enterprises to withstand and recover from climate shocks.

Women-led enterprises, cooperatives, and worker organisations have also highlighted the need for greater representation and engagement in climate policy and planning processes. Climate strategies are often developed without meaningful consultation with the workers and enterprises most affected, limiting their relevance and effectiveness (Mahila Housing SEWA Trust et al., 2025; Dias et al., 2023). As a result, policy frameworks frequently remain disconnected from workers' lived realities, with national and local climate strategies prioritising technical measures while overlooking the conditions, constraints, and contributions of women-led MSMEs and informal workers (Valdivia et al., 2025). Strengthening institutionalised mechanisms

for social dialogue, consultation, and participatory planning can help ensure climate policies reflect local risks, sector realities, and women's lived experiences. Greater and more systematic engagement with women-led enterprises, cooperatives, employers' and business membership organisations and workers' organisations is therefore essential to designing adaptation strategies and investments that are accessible and effective.

Women-led MSMEs – particularly those operating in care, waste picking, and environmental and community-based services – have also emphasised the need for greater recognition of their contributions to climate adaptation and mitigation. These roles are often overlooked in national climate strategies and financing frameworks, limiting their access to climate finance and policy support (Dias et al., 2023). Formal recognition of care and informal sector enterprises as climate-relevant actors is essential to ensure their inclusion in climate policy, planning, and investment processes, and to enable them to access the resources needed to sustain and scale their contributions.

Together, these financial, technical, and policy constraints highlight that strengthening the resilience of women-led MSMEs requires not only enterprise-level support, but also systemic investment in the enabling environments that shape women's ability to adapt

5. Case studies: Enterprise responses at the care-climate nexus

The impacts of climate change and care system constraints vary across enterprise models, sectors, and operating environments. The following case studies present in-depth examples of women-led MSMEs operating both within and beyond the care economy, whose daily lives and businesses are shaped by interconnected care and climate pressures.

These cases illustrate the vulnerabilities women-led MSMEs face, as well as the strategies they are using to maintain operations and build resilience. They show how climate-related shocks disrupt business activities, affect workforce wellbeing, and reduce productivity, particularly as women entrepreneurs and workers manage rising unpaid care responsibilities alongside paid work. They also highlight the important role women-led MSMEs play in sustaining livelihoods, supporting workers, and strengthening household and community resilience, including through the provision of care-related goods and services in some contexts.

The case studies further identify practical entry points for strengthening the climate resilience of women-led MSMEs. By examining both enterprise challenges and adaptive responses, they offer insights for donors and development agencies, governments, and investors seeking to design interventions that better recognise and support the interconnections between care work, climate resilience, and enterprise performance.

5.1 Abodana Handicrafts Cooperative (India)

Enterprise profile

The Abodana Mahila Chaapkaam SEWA Sahkari Mandali (Abodana Handicrafts Cooperative) is a women artisans' cooperative based in Ahmedabad, Gujarat, supported by the SEWA Cooperative Federation since 2019. It provides livelihoods to approximately 428 informal women artisans engaged in embroidery, stitching, appliqué, beadwork, and related textile crafts. The cooperative operates through a hybrid model, combining an aggregation and administrative hub at SEWA ni Haveli, a three-storey heritage building in Ahmedabad's old city, with a distributed network of home-based artisans across Ahmedabad city and two neighbouring districts. Core functions such as raw material storage, sampling, and packaging are partially centralised at the Haveli, while production is largely decentralised through piece-rate work. In addition to production, Abodana supports livelihood generation, capacity building, and the preservation of traditional crafts.

Size	400+ Home-Based Artisans (Worker Cooperative)
Sector	Handicraft Production
Geography	Ahmedabad, Kadi and Kalol, Gujarat, India

Care-climate challenges and impacts

Abodana operates in a context of rising extreme heat, with Ahmedabad experiencing more frequent and intense heatwaves. These conditions interact with workspace constraints, production systems, and women artisans' unpaid care responsibilities, creating compounding pressures across both work and household domains.

At the workspace level, artisans described challenges managing heat exposure during periods of extreme heat. While SEWA ni Haveli includes large windows and natural ventilation intended to keep it cool in summer, rising temperatures and limited scope for structural modification still pose challenges in maintaining comfortable working conditions. Artisans continuously adjust windows, fans, and workstations to balance heat, airflow, and light. These micro-adjustments can disrupt workflow, reduce productivity, and increase physical strain. Some tasks, such as fabric cutting, require still air, forcing workers to turn off fans even during peak heat.

At the household level, where most production takes place, climate impacts are closely intertwined with unpaid care responsibilities. Women artisans balancing childcare, eldercare, and domestic work face increased workloads during extreme heat, as early and late hours are occupied with care responsibilities. These pressures are often particularly acute for younger women balancing paid work and childcare. Many home-based artisans also work in densely populated informal settlements or poorly insulated homes with tin roofs, where limited cooling options and restricted ability to modify housing conditions intensify heat exposure.



During the early and late hours of the day, I'm usually occupied with household chores... I work on Abodana orders in the afternoon... since most of the family members are away, I also have the mental and physical space to focus on my craft.

ABOODANA COOPERATIVE MEMBER

Heat-related occupational health impacts are significant. Artisans report dehydration, fatigue, headaches, and exacerbation of chronic conditions, leading to increased absenteeism and, in some cases, hospitalisation. These effects undermine worker wellbeing, production timelines, and income stability.

At the enterprise level, these intersecting pressures affect workflow and reliability. Increased sick leave – linked to heat-related illness and other family care needs – and reduced working hours leads to delays in order completion. Transportation challenges during periods of extreme heat also affect the movement of raw materials and completed orders. Unequal access to water and electricity further shapes working conditions, with artisans in lower-income areas facing additional barriers to cooling and care.

Current adaptation strategies and mechanisms

Abodana and its members employ a range of adaptation strategies to manage the combined pressures of extreme heat and unpaid care work. These strategies demonstrate significant personal and collective agency but remain largely individualised and resource-constrained.

Flexible and care-responsive work arrangements are central to the cooperative's approach. Artisans can take work home, adjust their hours, and shift between home-based and centralised production. This flexibility enables women to balance income generation with care responsibilities, particularly during periods of extreme heat, when household care demands increase and mobility becomes more difficult.

Artisans also adopt temporal adaptations, adjusting working hours to avoid peak heat. While this supports continued production, it compresses working time, increases fatigue, and reduces opportunities for rest and recovery.

At the workspace level, artisans engage in continuous micro-adjustments to manage heat exposure. At SEWA in Haveli, artisans reposition workstations near windows for light, intermittently open and close windows to regulate temperature, and share limited cooling resources such as fans and coolers. While helpful and necessary, these adaptations are often time-consuming and disrupt sustained productivity. At home, artisans limit the use of cooling devices due to cost, work at night, and rely on shared family resources, often at the expense of comfort and health.

The cooperative model provides an important source of collective support in the face of climate stress. It helps members access information, healthcare-related social security schemes, and government support systems. For example, women artisans were supported in obtaining official artisan cards, enabling greater recognition and participation in government-supported markets and exhibitions. The cooperative also helps identify and articulate heat-related challenges that workers may not always perceive as climate risks, including headaches, eye strain, fatigue, and workflow disruptions. In this way, it helps translate individual experiences into collective awareness, advocacy, and adaptive responses.

The cooperative and broader SEWA network have also begun experimenting with co-created adaptation strategies, including heat awareness messaging, alternative cooling practices, and adjustments to lighting and work arrangements.

Investment needs and enabling conditions

Strengthening the climate resilience of Abodana requires coordinated investment across infrastructure, services, and enterprise support systems.

Climate-resilient workspace infrastructure and cooling solutions. Targeted investments are needed to improve ventilation and cooling in both aggregation and home-based workspaces. Access to low-cost cooling technologies – such as coolers and air conditioners – is also essential, particularly for informal and home-based production environments.

Enterprise resilience. Support to facilitate market linkages, including access to public markets and exhibitions, can help stabilise income generation when operations are disrupted by extreme heat. As the handicraft sector is largely seasonal, alternative off-season income opportunities are also important to strengthen resilience and reduce income volatility.

Care-supporting infrastructure and services. Investments in childcare, water access, sanitation, and related services are critical to reducing unpaid care burdens and stabilising working time. Strengthening these systems would improve worker wellbeing and enable more consistent engagement in income-generating activities.

Data and participatory adaptation planning. Expanded research on the intersections of heat, occupational health, informal work, and unpaid care work is needed to inform more effective responses. This should be paired with participatory adaptation planning involving artisans, cooperatives, and workers' organisations to ensure locally appropriate, scalable solutions that reflect worker perspectives.

Source: SEWA Cooperative Federation & Urban Design Square, 2025; Key informant interview with Amisha Darbar (Manager, Abodana Handicrafts Cooperative), Neha Abraham (Lead, Advocacy & Partnerships, SEWA), Tanvi Haldania (Crafts Manager, SEWA), and Rohan Kinger (Research Consultant, SEWA), conducted May 2026.

5.2 Komodo Water (Indonesia)

Enterprise profile

Komodo Water is a woman-led social enterprise operating in the remote islands and mountainous regions of East Nusa Tenggara, Indonesia. It provides sustainable water access and filtration solutions to last-mile communities using 100% solar-powered technology. Beyond drinking water, the enterprise produces ice for fisheries and supports irrigation for agriculture. Komodo Water designs and assembles its own systems from components sourced across Indonesia, allowing for rapid adaptation and repair in areas where standard supply chains do not reach.

Size	Small (10–49 employees)
Sector	Water access and filtration
Geography	East Nusa Tenggara, Indonesia

Care-climate challenges and impacts

Operating in an archipelago nation, Komodo Water faces a dual pressure: climate volatility simultaneously disrupts the enterprise's operations and intensifies the needs of the communities it serves. Extreme weather creates logistical bottlenecks that are difficult to anticipate and expensive to recover from. Heavy rains have swept away mountain pipelines entirely, requiring full replacement. Storms and high waves make inter-island boat crossings unsafe, while roads become impassable rivers during rains.

Climate shocks produce sharp swings in demand that make financial planning difficult. During heavy rainfall, sales drop as communities harvest rainwater; during droughts, demand spikes. In agricultural communities, a single unseasonal rain during coffee flowering can wipe out an entire year's harvest, eliminating clients' income and ability to pay.

When infrastructure fails, women in the community absorb the cost. In East Nusa Tenggara, water collection is culturally designated as women's work. In this context, Komodo Water's ability to reduce women's time spent collecting water from 6 hours to 10 minutes had a drastic impact on the women in the community.



When we made the water closer – from six hours to like only ten minutes – they cried. Because they never thought it would happen. We were all thinking, 'Why are you not just bringing the water closer using a pump?' But for them, it had never been in their thoughts. That's the barrier to entry – the cultural one – for women in this region specifically.

SHANA FATINA, CEO, KOMODO WATER

Current adaptation strategies and mechanisms

Komodo Water employs four interconnected strategies to respond to and proactively anticipate climate-related disruptions. **Data-driven logistics.** Rather than relying on general weather forecasts, Komodo Water uses advanced ocean wave tracking and historical weather logs to plan with granular precision. Heavy rainfall in East Nusa Tenggara typically lasts only two to three hours, allowing the team to identify "dry windows" within a disrupted day and schedule construction, repairs, and inter-island crossings accordingly.

Climate-resilient engineering. After losing pipelines to flooding, Komodo Water re-engineered its approach. The team no longer draws directly from streams that swell during rainfall. Instead, they construct runoff river channels and upstream storage tanks that buffer water flow without exposing pipelines to flood pressure. New installations are stress-tested during the heaviest rainfall of the year so vulnerabilities are identified before long-term operation begins.

Supply chain sovereignty. Komodo Water designs and assembles its own technology from components sourced through a network of Indonesian workshops rather than a single supplier. This enables rapid repair, adaptation to field conditions, and "made-to-order" components when parts are damaged.

A family-integrated workforce model. Staff are encouraged to bring their young children (e.g., not yet school-aged) to the office and on field expeditions to remote islands, reflecting an approach that integrates work and family life rather than separating them. The enterprise's 14 direct staff operate as 14 families working in common cause, fostering cohesion that helps sustain performance in environments that might otherwise lead to high attrition. This model is formally supported through a dedicated travel allowance that enables employees to bring family members on remote assignments. As CEO Shana Fatina notes, the company sees this as "the easiest thing that the company can give you" to ensure staff have the support systems they need when working in challenging conditions. Combined with a flexible, results-oriented work environment – where staff can work from anywhere and are not expected to separate their life mission from their work – these policies contribute to strong team cohesion and reduced attrition.

Investment needs and enabling conditions

Despite the above adaptations, Komodo Water operates at the limits of what is possible without dedicated climate resilience funding. CEO Fatina identifies three shifts required to scale impact and secure viability, for Komodo Water specifically, as well as for similar enterprises.

Closing the context gap between donors and field realities. Global North funders, shaped by continental, temperate geographies, often struggle to grasp the specific challenges of island-based water distribution. Investors must invest time in understanding these context-specific operating environments before designing funding mechanisms, recognising that enterprises like Komodo Water possess operational expertise that cannot be replicated from a distance.

Embedding climate risk in investment calculations. Investors must stop treating climate disasters as unlikely events and start pricing them as guaranteed operating costs. A single flood or storm can wipe out years of returns, yet standard financial models ignore this reality. Komodo Water argues that upfront investment in climate mitigation is far cheaper than post-disaster recovery, and ROI calculations should reflect this.

Dedicated funding for innovation at the climate-water frontier. Komodo Water seeks flexible capital to build two instruments. The first is a Water Database mapping resource availability against climate patterns, freely accessible so communities can prepare for water stress. The second is a Mobile Disaster Module: a portable

water system functioning without electricity or connectivity, deployable immediately after disasters and operational for three years during recovery.

Source: Key informant interview with Shana Fatina, CEO of Komodo Water, conducted 8 January 2026.

5.3 AgeWatch Africa Foundation (Kenya)

Enterprise profile

AgeWatch Africa Foundation is a Nairobi-based women-led non-profit social enterprise providing professional eldercare services to vulnerable older persons in Kenya.¹ Providing both home-based care and a care centre, the organisation trains and deploys predominantly female caregivers to support elderly clients who can no longer manage daily tasks independently. It operates in both urban Nairobi and expanding rural areas, including northern Kenya, where communities face acute climate stress.

Size	Micro (less than 10 employees)
Sector	Eldercare (direct care services)
Geography	Nairobi (urban), northern Kenya (rural) and the Lake Victoria region of western Kenya (rural)

Care-climate challenges and impacts

Kenya's climate extremes arrive with increasingly severe force, placing AgeWatch Africa at the centre of a recurring cycle of climate-related stress.

Elderly clients face heightened vulnerability during both drought and floods. During the prolonged dry season from January to March, older persons – many of whom live alone with diminished physical capacity – struggle to fetch water, collect firewood, or manage basic food preparation. When the rains arrive, they bring intense storms and flooding that displace residents, heighten disease risks, and leave the most vulnerable clients entirely dependent on their caregivers. In the 2024 flooding season, AgeWatch Africa supported over 1,200 households of older persons affected in Nairobi alone, with impacts ranging from loss of property to, in some cases, loss of life.

The organisation's female caregivers absorb a compounding double burden. Women constitute roughly two-thirds of AgeWatch Africa's workforce, and during climate shocks, they face simultaneous pressure from two directions: the heightened needs of their elderly clients and the intensified unpaid care demands in their own homes, where they are usually the primary caregivers. During droughts, female staff travel long distances to fetch water and firewood for their own families before arriving to perform the same tasks for their clients. The result is that caregiver burnout becomes a direct operational risk for the enterprise.

A six-week power outage during the 2024 storms exposed critical infrastructure fragility. A storm brought down the electrical pole supplying AgeWatch Africa's care centre, leaving the facility without grid power for six weeks while the national utility company – overwhelmed by widespread storm damage – was unable to respond. The centre scaled back operations and improvised with small solar lanterns for basic lighting, but the episode made plain the enterprise's dependence on unreliable public infrastructure.

¹ While AgeWatch Africa Foundation was founded by Richard Waindi, CEO, its management team and Board consists of 50% women, and its Advisory Board is 67% women.



The most recent severe one was in 2024, between April and June... in Nairobi city, we worked with over 1,200 households of older persons who suffered in one way or another from floods. When there are floods, again, the most affected persons are the vulnerable ones – children in the family and older persons – and the caregivers for those two vulnerable age groups are mostly women. So, you find there's a lot of demand for their attention... they get overworked.

RICHARD WAINDI, FOUNDER, AGEWATCH AFRICA FOUNDATION

Current adaptation strategies and mechanisms

Flexible shift structures can help to protect caregivers from burnout during peak climate stress. AgeWatch Africa's most effective adaptation has been a job-sharing model introduced during extreme weather periods. Standard eight-hour shifts have been reduced to four or six hours, depending on the demands of each client, with high needs or bed bound clients attended by two caregivers working a four-hour shift each. This frees workers to manage their domestic responsibilities without abandoning their clients, and while it requires deploying more caregivers to cover the same caseload, the costs are offset by significantly lower rates of burnout and attrition.

Weather monitoring and emergency preparedness underpin operational planning. The organisation uses two-week forecasts from the Kenya Meteorological Department alongside direct weather observation to anticipate extreme weather events and deploy staff accordingly. Training focuses on disaster response and early safety information. During flooding, caregivers have improvised transport – including crossing flooded streams by boat – to reach clients near Lake Victoria.

Kitchen farming with domestic wells addresses immediate food insecurity, but scaling it requires a solar-powered borehole. During droughts, AgeWatch Africa supports older clients to cultivate small land parcels using water from domestic wells to grow vegetables and improve food security. The organisation envisions scaling this through a proposed solar-powered borehole that would guarantee water year-round and engage younger community members as paid labour, generating surplus produce for older persons to sell.

Investment needs and enabling conditions

A solar-powered borehole would transform the centre's water security and community reach. AgeWatch Africa's most urgent unfunded priority is a permanent borehole – drilled to 100–150 metres to reach a reliable water table – powered by solar panels that would harness the region's high solar irradiance rather than rely on grid electricity. The project has been costed and designed but has not secured donor support despite multiple proposals. Beyond supplying the care centre year-round, the borehole would provide clean water to the surrounding community and generate revenue through sales to local businesses, cross-subsidising care operations.

Donors must recognise eldercare as a critical and systematically underfunded segment of the care economy. Waindi argues that the global funding ecosystem consistently prioritises children, women, and youth in care economy funding – leaving older persons under-served despite their central role in household and

community life. He makes a direct productivity argument: when an older family member is unwell and without care, working-age relatives are less able to function economically. The care of older persons is not marginal but a foundation of household resilience – and one that will become more pressing as populations age across Sub-Saharan Africa.

Social protection reforms are needed to reach the most climate-vulnerable older persons. Kenya's current social protection cash transfers for older persons are restricted to those aged 70 and above, at approximately USD 15 per month – an amount Waindi describes as “a literal drop in the ocean” given the cost of living, medication, and nutritional needs of elderly clients. He advocates for lowering the eligibility age to capture those in their 50s and 60s who are already vulnerable, and for meaningful inclusion of older persons in county-level climate action committees so that decisions affecting them are made with, rather than for, them.

Source: Key informant interview with Richard Waindi, Founder of AgeWatch Africa Foundation, conducted 12 January 2026

5.4 Solar Sister (Kenya, Nigeria, Tanzania)

Enterprise profile

Solar Sister is a woman-led social enterprise that recruits, trains, and supports women entrepreneurs to distribute clean cooking and household energy products – including efficient cookstoves, solar lighting, and phone charging solutions – to last-mile communities across Kenya, Nigeria, and Tanzania. Its model is based on the premise that addressing energy poverty requires reaching women who are responsible for household energy in rural communities and often excluded from conventional economic opportunities. Solar Sister operates across 28 of Kenya's 47 counties, 30 of Nigeria's 36 states, and much of Tanzania, with continued expansion underway.

Size	Medium (50-249 employees)
Sector	Clean cooking and household energy solutions
Geography	Kenya (28 counties), Nigeria (30 states) and Tanzania; urban and rural

Care-climate challenges and impacts

Floods and extreme heat directly sever the supply chains and sales opportunities on which women entrepreneurs depend for income. When flooding prevents product delivery from Solar Sister's hubs to rural entrepreneurs, those women cannot sell – and because their livelihoods rely almost entirely on commissions, income loss is immediate. Extreme heat compounds the problem in northern regions, making it unsafe to move between homes and marketplaces during the hottest hours, creating periods of economic exclusion for women entrepreneurs.

Climate stress forces women entrepreneurs to navigate trade-offs between their businesses and their households. Many entrepreneurs are also smallholder farmers, and erratic rainfall compels them to over-invest in agriculture precisely when climate uncertainty is highest. Delayed or excessive rainfall means women redirect their entire attention and capital into protecting harvests: fertiliser costs rise, farmlands become harder to reach, and the Solar Sister business is set aside. The result is seasonal income collapse that Solar Sister addresses through business development support, helping women plan for agricultural downtime.



When it's the rainy season, most of these women are down on resources. Their entire capital goes into [farming]. The cost of fertiliser is higher. They have to go into more interior locations to access fertile farmlands... You tend to see that the entire climate dynamic affects them – they are put in that situation where they have conflicting attention.

HANATU ONOGU, STRATEGIC PARTNERSHIPS AND PROGRAMMES, SOLAR SISTER

In certain geographies, resource scarcity exacerbates community security risks that constrain women's economic participation. In Wajir and other arid northern areas of Kenya, seasonal conflict between herding communities over cattle and grazing land has long limited when and where women entrepreneurs can work safely. Solar Sister adapts in two ways: local entrepreneurs self-regulate their schedules based on ground-level knowledge, pausing field work during dangerous periods; and visiting staff travel only with community or government escorts. The enterprise suspends business expectations for affected entrepreneurs until the security situation improves. Climate-induced resource scarcity – degradation of grazing land and water sources – intensifies these conflicts. Climate change is intensifying conflicts over cattle grazing land and water in Wajir County, Kenya (Kibwarata, 2023). Recurrent and prolonged droughts – such as those in 2011, 2017, and the 2022–2023 period – have decimated livestock and exhausted natural resources, compelling pastoralists to migrate in search of pasture and directly triggering inter-communal feuds and resource-based violence. Investors who do not invest time understanding such context-specific risks will consistently underestimate the operating environment that women-led MSMEs in the last mile must navigate.

Current adaptation strategies and mechanisms

Supply chain diversification protects product availability when suppliers are disrupted. Solar Sister maintains four to five suppliers per country for core cookstove and lighting products. If flooding or logistical failures affect one supplier, another steps in to keep products moving. The enterprise acts as a centralised distributor, absorbing disruptions so women entrepreneurs are shielded from supplier failures they cannot manage themselves.

Business development support builds the financial agency women need to survive climate-induced downtime. Solar Sister's 12-month training curriculum and Solar Sisterhood peer networks build skills in financial management, network marketing, and market diversification, ensuring entrepreneurs have sufficient reserves to survive seasonal disruptions without abandoning their businesses. Agency – the capacity to understand and respond to one's business environment – is the most durable form of climate resilience for women operating without safety nets.

Climate change is generating new demand that Solar Sister is positioning to meet. Heavy rainfall makes traditional open-fire cooking impossible, driving demand for efficient indoor cookstoves. Grid instability during storms increases demand for backup solar lighting and phone-charging solutions. Solar Sister sees further opportunity in productive use of energy equipment – solar-powered milling, irrigation, and fishing lights – that would transform women from household energy retailers into agricultural service providers, creating more resilient, higher-value income streams.

Investment needs and enabling conditions

Flexible, long-term funding – not project cycles – is the single most important enabler for climate-resilient last-mile energy enterprises. Climate resilience cannot be built through periodic waves of themed funding that disappear when the next priority emerges. Solar Sister has thrived during climate-focused funding cycles only to see support evaporate before embedding sustainable changes. What is required is climate resilience as a standing, cross-sectoral commitment embedded in 10-, 20-, and 30-year strategies. Additionally, funding should support the development of business models and of a supportive business environment for enterprises such as Solar Sister, so that, ultimately, businesses require less ad-hoc support and will be able to function and thrive independently.

Governments must move beyond early warning to fund actual recovery infrastructure. Authorities issue flood warnings telling communities to evacuate, but offer no funded alternative for where people should go or how they should recover. For Solar Sister's entrepreneurs, this means displacement and lost income with no institutional support. Governments should fund community-level infrastructure, immediate restoration, and recovery processes as standing provisions rather than emergency responses.

Investors must invest time understanding the context-specific operating environments of last-mile women-led enterprises. The risks women entrepreneurs face are often invisible to distant funders and vary significantly by geography, season, and community. Climate change compounds these risks by intensifying resource competition and displacing communities. Investors who apply generic frameworks without engaging local context will systematically underinvest in enterprises doing essential work in the most difficult environments.

Source: Key informant interview with Aidah Waweru and Hanatu Onogu, Solar Sister, conducted 19 January 2026

5.5 Kiidu (Thailand)

Enterprise profile

Kiidu is a Bangkok-based women-led platform that matches families with domestic care workers – including nannies, nurses, elderly caregivers, tutors, and drivers. Founded by Alfiah Strohal, the enterprise operates across urban Thailand, connecting predominantly women workers with households and serving as an intermediary that supports both parties through training, contracts, and ongoing guidance. Kiidu’s workforce is almost entirely female, and the enterprise provides a flexible caregiver training programme covering childcare, eldercare, and increasingly climate and environmental awareness, delivered both on-site and online through its learning platform.

Size	Small (10-49 employees)
Sector	Childcare, eldercare and domestic worker placement
Geography	Bangkok and urban Thailand

Care-climate challenges and impacts

Extreme heat in Bangkok directly disrupts Kiidu’s operations and constrains the quality of care workers can provide. Thailand’s summer temperatures regularly exceed 40°C, and the effects are felt at every level of Kiidu’s model. High indoor temperatures can make training sessions difficult for caregivers to concentrate and fully engage with course material, especially during power outages. For nannies working in client households, extreme heat curtails outdoor activities for children and forces care workers to improvise indoor alternatives with whatever facilities the family provides – and not all homes are adequately equipped. Elderly clients face the greatest physical risk, requiring caregivers who are trained to anticipate and respond to heat-related health deterioration.

Flooding in Bangkok affects nannies’ ability to reach client households reliably, creating care gaps that ripple through working families. When floods disrupt transport across the city, care workers face delays or are unable to travel at all. Because many families rely on nannies to go to work themselves, even short disruptions have outsized economic impacts. Kiidu currently responds by encouraging proactive communication: nannies notify clients as early as possible and provide updates on their estimated arrival time. However, the enterprise does not yet have a formal system for issuing weather alerts or coordinating across its network when weather events are likely to affect multiple caregivers at once.

Current adaptation strategies and mechanisms

Neighbourhood-based matching reduces climate exposure for care workers and lowers the carbon footprint of the service. For nannies who prefer live-out arrangements – travelling to work each morning and returning home in the evening – Kiidu prioritises matching them with families in close proximity to their own homes. This shortens commute times, reduces exposure to heat and flooding during travel, and limits the physical toll of daily movement in a demanding urban climate. While the practice originated from workers’ preferences rather than a deliberate climate strategy, it brings dual benefits: less travel means less fatigue and fewer emissions.

Climate awareness training positions Kiidu's workers as a channel for environmental education into the households they serve. Kiidu's online training curriculum includes modules on climate change awareness, heat safety, and environmentally responsible household practices – from waste separation to energy use. Strohal's vision extends beyond compliance: she sees domestic care workers, who move regularly between households and have sustained relationships with both children and adults, as an underutilised vector for climate awareness. A caregiver who understands climate change can model sustainable behaviours for the children she looks after, advise on household practices, and carry that knowledge into new placements every one to two years.



The caregiver... they start work in a new family often – like every one or two years – and if we give them the knowledge and the information about this, they can be a real influence to the family they go to. With the nanny, they can influence the kids. With the maid, they can manage the household. Everything starts from home.

ALFIAH STROHAL, FOUNDER AND CEO, KIIDU

Investment needs and enabling conditions

An in-app alert system would allow Kiidu to reach its entire caregiver network instantly during extreme weather events. Kiidu's most concrete investment priority is an automated notification function within its platform that would push real-time weather alerts to all registered caregivers when temperatures spike or floods are forecast. Currently, communication relies on individual caregivers monitoring conditions themselves and contacting clients directly. A centralised alert system would allow the enterprise to coordinate across its network. By receiving early updates, families are given the necessary time to adjust their schedules and make alternative plans for themselves, which prevents sudden, unexpected care emergencies and avoids customers becoming angry over unannounced absences.

Extending social security coverage to domestic care workers is the single most important enabling condition the government could provide. Thailand's social security system does not cover domestic care workers, meaning that if a nanny becomes ill – from heat exhaustion, flooding-related injury, or any other cause – she bears the full cost of medical treatment on a constrained income. Extending social security to this predominantly female workforce would provide a basic floor of protection in line with existing labour standards such as Convention 189 of the ILO on Domestic Workers, which would make the occupation more sustainable, and would reduce the costs that climate-related illness currently imposes almost entirely on individual workers.

Source: Key informant interview with Alfiah Strohal, Founder and CEO, and Tanee Arissara, Kiidu Thailand Co., Ltd., conducted 7 January 2026

6. Recommendations for advancing care-sensitive climate-resilient PSD

Addressing the climate and care constraints facing women-led MSMEs requires coordinated action across donors, governments, investors, employers and workers' organisations, and other private sector development actors. This research demonstrates that care systems, gender equality, climate resilience, and enterprise development are deeply interconnected. Yet current climate and private sector development approaches continue to overlook care as foundational economic and climate infrastructure, limiting the effectiveness, inclusiveness, and sustainability of their investments.

To address these gaps, this section presents a set of targeted recommendations to strengthen care-sensitive, climate-resilient private sector development. These recommendations aim to support the economic empowerment and resilience of women-led MSMEs by addressing key structural, financial, and policy barriers. They are directed toward three key stakeholder groups: donors and development agencies, national and local governments, and impact investors and financial institutions.

Donors and development agencies

- **Increase investment in care as climate and economic infrastructure.** Donors should expand financing for care services, infrastructure, and policies – including childcare, eldercare, healthcare, WASH, energy systems, and paid care leave – as core components of climate adaptation and private sector development strategies. Strengthening care systems reduces the time and physical labour women devote to unpaid care work, enabling greater economic participation, strengthening enterprise productivity and resilience, and enhancing their ability to respond and adapt to climate shocks. Investments should also support climate-resilient working environments, including shaded markets, cooling systems, ventilation, and safe working environments, which are essential to protect worker health and sustain enterprise productivity.
- **Support innovative gender-responsive climate finance mechanisms.** Donors should invest in and help scale innovative climate finance mechanisms that explicitly recognise and reward women's contributions to climate adaptation, care, and community resilience. This includes supporting the development and piloting of gender-responsive carbon and resilience financing approaches, which quantify and monetise women's empowerment outcomes linked to climate action (see box 3). Donors can play a catalytic role in building the evidence base, supporting market development, and ensuring that climate finance flows more directly to women-led enterprises, workers, caregivers, and community organisations at the frontline of climate impacts.
- **Expand flexible, long-term financing tailored to women-led MSMEs.** Donors should expand access to grants, concessional loans, and blended finance tailored to the needs of women-led MSMEs adapting to climate risks. Financing mechanisms should reflect the longer time horizons required for climate adaptation and enterprise growth and address structural barriers entrepreneurs face, including collateral requirements and limited access to formal financial services. Catalytic capital and risk-

sharing mechanisms can help mobilise additional private investment in women-led enterprises, including those operating in care-related sectors.

Box 3: Gender-responsive climate finance mechanisms

The W+ Standard, developed by WOCAN, is one example of an emerging gender-responsive climate finance mechanism. The standard measures and monetises women's empowerment outcomes linked to climate and natural resource initiatives, creating pathways for climate finance and carbon market revenues to flow directly toward women and communities. Such approaches highlight opportunities to better recognise and finance women's contributions to climate adaptation, resilience, and care systems

- **Strengthen technical assistance and enterprise support.** Donors should support the expansion of gender-responsive business development services, mentoring, and technical assistance to support women-led MSMEs in strengthening their climate resilience and operational sustainability. Enterprise support should be flexible and accessible, taking into account women entrepreneurs' time and mobility constraints related to unpaid care responsibilities. This includes support to adopt climate-resilient and care-enabling technologies, strengthen financial and operational systems, and scale sustainable business models. Donors should partner with women's cooperatives, and employer and worker organisations, to deliver contextually relevant assistance that reflects women's needs and responds to local climate risks and challenges.
- **Support collective adaptation through women-led cooperatives and employer and worker organisations.** Donors should invest in women-led cooperatives, associations, and employer and worker organisations as key partners in climate adaptation. These organisations play critical roles in social dialogue and policy making, and in disseminating climate information, strengthening occupational safety and health, providing shared infrastructure, and supporting enterprise resilience. Targeted funding and capacity-building can help scale collective solutions, reduce individual risk burdens, and ensure climate and private sector development interventions reflect the realities and priorities of women workers and entrepreneurs.
- **Champion care within global climate policy and finance processes.** Donors should promote the recognition of care as climate infrastructure within international forums such as the UNFCCC and COP, and support the participation of women-led enterprises, cooperatives, and employer and worker organisations in climate policy and finance discussions. This includes funding their engagement and strengthening their capacity to influence global climate agendas and investment priorities.
- **Fund applied research to generate region- and sector-specific evidence on the care-climate nexus.** Donors should invest in research and data collection in partnership with women-led enterprises, cooperatives, and employer and worker organisations to understand how climate and care dynamics affect different groups of women workers and enterprises across sectors and value chains. This includes generating sex-disaggregated and sector-specific data on risks, adaptation strategies, and support needs. Strengthening this more granular and contextualised evidence base is critical to inform targeted policies, financing, and enterprise support that address the highly localised barriers faced by women-led MSMEs.

National and local governments

- **Integrate care into climate and private sector development frameworks.** Care should be explicitly recognised within national climate strategies, just transition frameworks, and private sector development policies. This includes recognising care workers and care enterprises as economic actors and investing in care services and care-enabling infrastructure as essential components of climate resilience and inclusive growth.
- **Expand climate-responsive social protection and enabling regulatory frameworks.** Governments should expand and adapt social protection programmes – including income support, cash transfers, health insurance, and childcare leave and services – to help women workers and women-led MSMEs manage and recover from climate-related shocks. This includes ensuring informal workers are recognised as workers and covered by social protection systems, and that self-employed workers are also covered by adequate protections. Governments should also strengthen regulatory environments to support the formalisation, access to finance, and operational continuity of informal enterprises, including measures that enable flexibility and service continuity during climate emergencies.
- **Invest in climate-resilient infrastructure.** Public investment in climate-resilient infrastructure – including water systems, transport systems, cooling centres, public markets, childcare facilities, schools, healthcare centres, and safe workplaces – is essential to sustain enterprise operations, protect worker health, and ensure continuity of care and economic activity during climate-related disruptions. Care infrastructure should be explicitly recognised and prioritised as essential economic and climate infrastructure within adaptation, urban development, and private sector development planning.
- **Strengthen access to climate information and early warning systems.** Governments should expand climate information and early warning services accessible to women-led MSMEs and workers through multiple formats—such as mobile phones, radio, loudspeakers, and community networks—to reach women with diverse literacy, digital access, and mobility constraints. Awareness campaigns should provide sector- and location-specific guidance. Governments should also partner with women-led enterprises, cooperatives, and employer and worker organisations to support effective development, dissemination, and uptake.
- **Institutionalise participatory and inclusive climate and private sector policy processes.** Governments should establish formal mechanisms to ensure women-led enterprises, cooperatives, worker organisations, and caregivers are meaningfully engaged in climate and private sector development planning, through inclusive social dialogue. This includes supporting their participation in policy consultations, adaptation planning, and just transition processes. Strengthening participatory governance will ensure policies reflect lived realities, address care and climate constraints, and support more effective, inclusive, and locally grounded climate resilience and enterprise development strategies.

Impact investors and financial institutions

- **Establish blended finance facilities to build investment pipelines and mobilise private capital.** Donors, DFIs, and impact investors should collaborate to create dedicated blended finance vehicles using grants, concessional capital, and guarantees to crowd in private investment. These facilities can de-risk investments, extend time horizons, and support women-led MSMEs to invest in climate adaptation, care solutions (including workforce care support, services, and infrastructure), and enterprise growth. Blended finance facilities could also pilot innovative mechanisms such as gender-

responsive carbon or resilience credits that recognise and monetise women's contributions to climate adaptation, care work, and community resilience.

- **Integrate care, climate, and gender into strategy, underwriting, and impact management.** Move beyond narrow gender-diverse ownership metrics by integrating care, climate, and gender considerations into investment theses, due diligence, and portfolio management. Treat climate disruption and care-related labour constraints as structural business risks that shape productivity and continuity. Track outcomes for women workers, caregivers, and consumers – including decent work, workforce stability, productivity, wellbeing, and changes in unpaid care burdens – alongside climate resilience metrics.

Box 4: The care-climate-gender rubric

The Care-Climate-Gender Rubric, developed by Kore Global and IDRC, provides a conceptual framework, indicators, and data collection considerations to help investors, fund managers, and businesses drive greater gendered impact through their activities and investments at the care-climate nexus. It is designed to complement existing investor tools (e.g. 2X Criteria and climate metrics) and can be selectively integrated into due diligence, portfolio monitoring, and impact management systems.

- **Expand investment in care enterprises and care-enabling sectors as resilience infrastructure.** Investors should increase financing for enterprises in segments of the care economy such as healthcare, childcare, eldercare, domestic work, WASH, and energy, recognising them as critical climate resilience infrastructure. These sectors enable labour force participation, support enterprise productivity, and strengthen community resilience. Investing in care represents a high-impact opportunity to generate strong social, climate, and economic returns. Engage women workers, caregivers, and representative organisations in investment design and monitoring to ensure investments reflect lived realities and promote equitable, climate-resilient outcomes as well as decent work.
- **Offer shock-responsive and care-responsive financial products for MSME adaptation.** Financial institutions should design financing instruments that reflect climate and care risk realities and support women-led MSME adaptation. This includes providing flexible, patient capital and recognising climate disruptions and care constraints as structural business risks. Financial products should be accessible to women entrepreneurs and care enterprises and enable investments that reduce unpaid care burdens, protect working conditions and wellbeing, and strengthen enterprise resilience, particularly in climate- and care-affected sectors and geographies.
- **Extend climate finance access to informal and early-stage women-led MSMEs.** Design financial products and investment mechanisms that are accessible to informal and early-stage enterprises, which are often excluded from traditional finance. This includes reducing collateral requirements, simplifying application processes, and partnering directly with women worker organisations and intermediaries. Investors should also work with donors and development agencies to leverage grants, guarantees, and concessional capital to de-risk investments and expand financing to underserved enterprises. Expanding access to climate finance is essential to enable the women-led MSMEs most affected by climate and care risks to invest in adaptation and resilience.
- **Support enterprises to implement workforce care solutions and occupational safety measures that reduce absenteeism, protect health, and improve continuity.** These include childcare support, flexible

work arrangements, heat-health protocols, cooling and rest spaces, safe water access, and care and emergency leave, helping to strengthen productivity, retention, and long-term performance under increasing climate volatility. Where possible, these efforts should align with and complement government systems to support sustainability and scale.

Failure to address care constraints will continue to limit the effectiveness of climate and private sector development investments. Conversely, investing in care represents one of the most immediate and high-impact opportunities to strengthen enterprise resilience, expand women's economic participation, and support inclusive, climate-resilient growth. Integrating care into climate and private sector development strategies and investment is therefore not only a gender equality imperative, but an economic and climate necessity.

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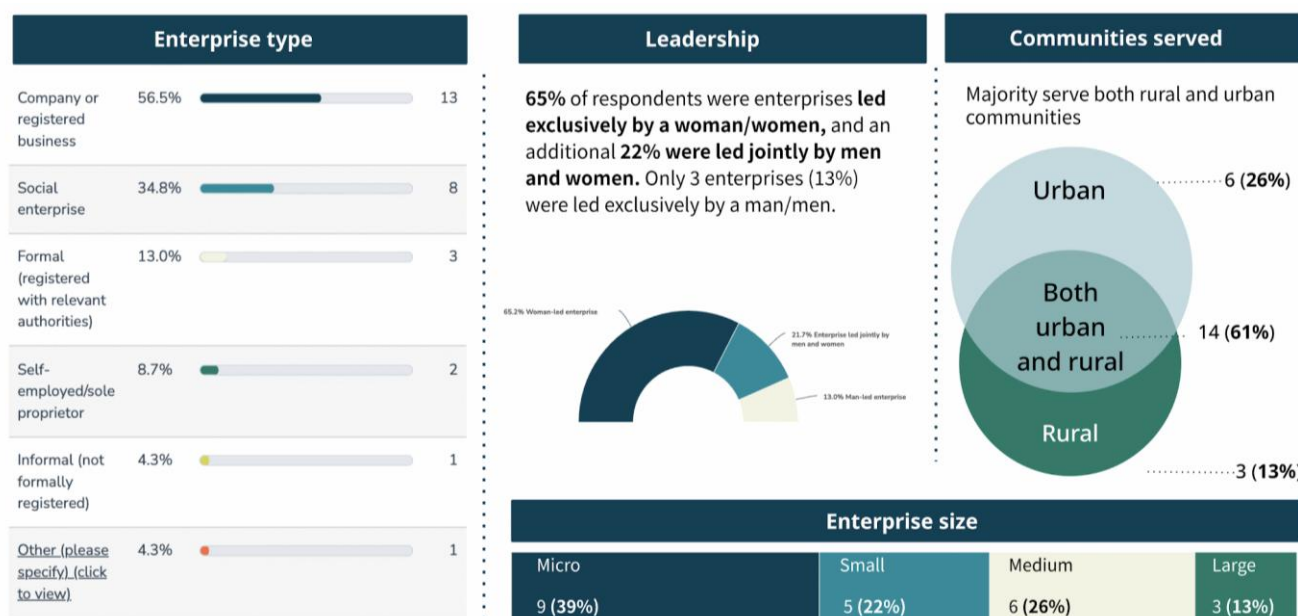
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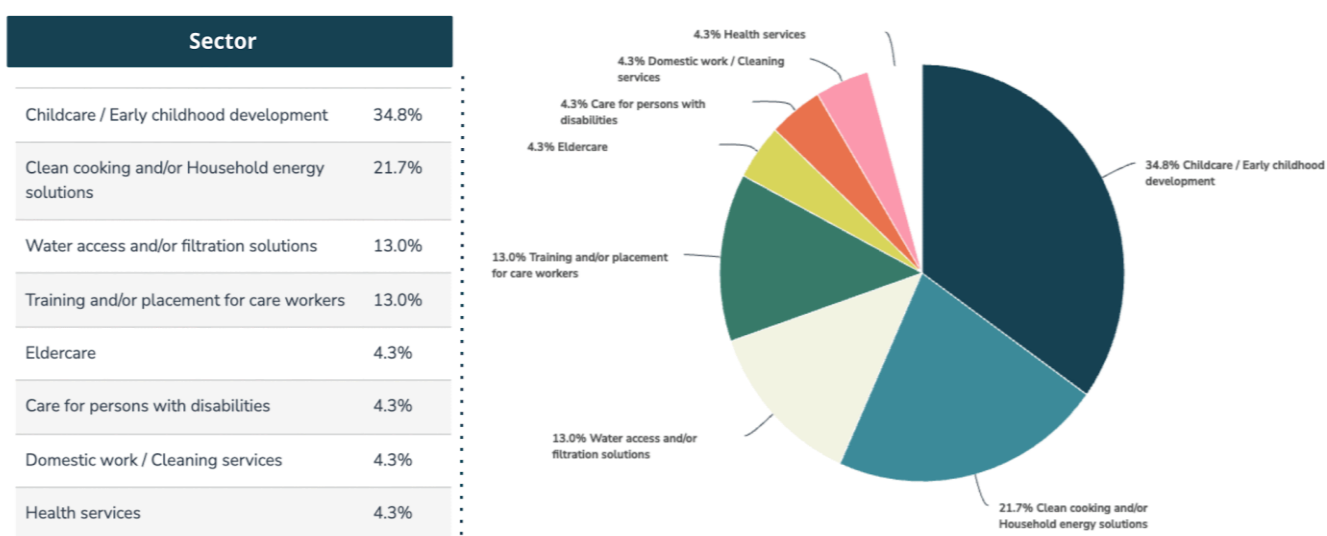
Annexes

Annex 1: Survey sample characteristics

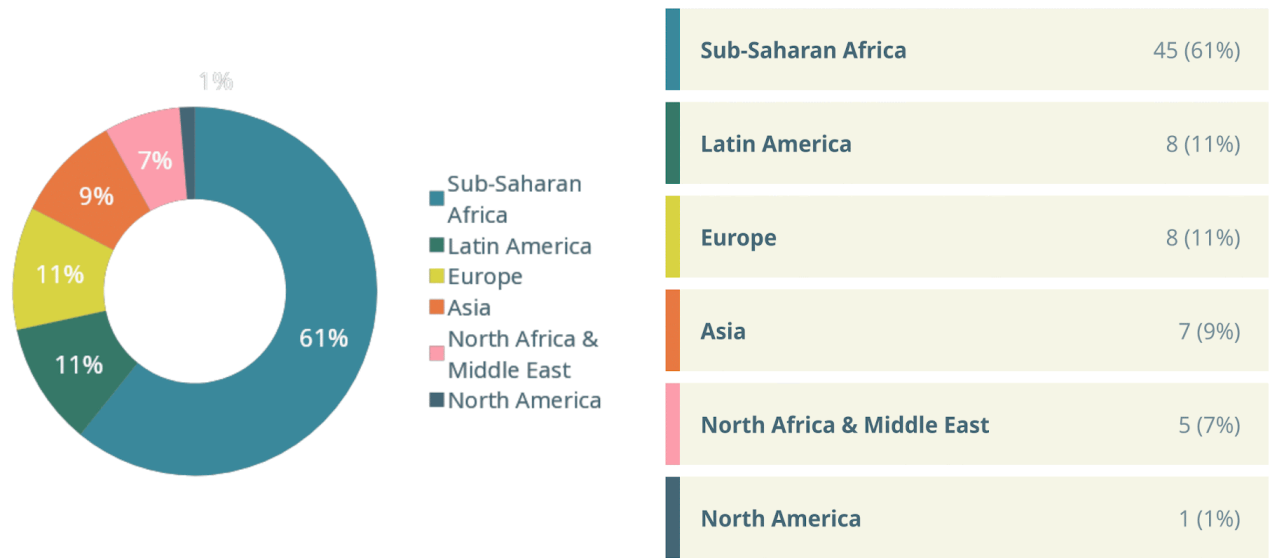


The final survey sample includes 23 responses, with 19 completed responses and 4 partial responses (83% completion rate).

The largest proportion of responses (35%) came from childcare enterprises, followed by those providing clean cooking and/or household energy and water access solutions.



The majority of respondents operate in countries in Sub-Saharan Africa (65%), with 8 respondents operating specifically in Kenya.



Annex 2: List of key informant interviews

Category	Name(s)	Organisation
Women worker organisations and associations	Adriana Paz	International Domestic Workers Federation (IDWF)
	Marieke Koning and Amalia Hammarlund	International Trade Union Confederation (ITUC)
	Mirai Chatterjee, Neha Abraham, Tanvi Haldania and Rohan Kinger	Self Employed Women's Association (SEWA)
	Rachel Moussie	Women in Informal Employment Globalizing & Organizing (WIEGO)
Donors, DFIs and experts	Sana Kapadia	Heading For Change
	Carolina Robino	International Development Research Centre (IDRC)
	Francisco Cos-Montiel	United Nations Research Institute for Social Development (UNRISD) Climate & Care Initiative
	Amar Gokhale	UN Women Care & Climate Entrepreneurship Accelerator
Women-led enterprises	Amisha Darbar	Abodana Handicrafts Cooperative
	Shana Fatina	Komodo Water
	Aidah Waweru & Hanatu Onogu	Solar Sister
	Richard Waindi	AgeWatch Africa Foundation
	Alfiah Strohal and Tanee Arissara	Kiidu Thailand Co, Ltd.



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