



QUARTERLY REPORT

**NOVEMBER
2024**

**Facilitating Micro & Small
Enterprises in the Fight
Against Climate Change**

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EXECUTIVE SUMMARY

This report explores the impact of climate change on Micro, Small, and Medium-sized Enterprises (MSEs) in Lagos, Nigeria, and assesses their readiness to adopt sustainable practices. A survey of 150 MSEs across various sectors revealed that 90% of respondents are aware of climate change, but only 30% possess the necessary skills for climate action. While 83% are open to adopting eco-friendly practices, only 53% reported being directly affected by climate change, primarily through increased costs and operational disruptions

Key challenges identified include a significant skills gap, limited financial resources, and the need for better support mechanisms. The findings suggest a critical need for targeted policy interventions, improved access to finance, and knowledge-sharing programs to bridge the gap between awareness and action. By addressing these barriers, MSEs can be empowered to contribute meaningfully to climate resilience and sustainability efforts.

Finally, the report highlights the importance of equipping MSEs with the tools and resources necessary to integrate climate action into their operations, ensuring long-term sustainability and resilience in a rapidly changing environment.



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Introduction

Global warming and climate change are among the most pressing challenges of our time, impacting economies, societies, and ecosystems worldwide. Africa is particularly vulnerable due to its reliance on climate-sensitive sectors like agriculture, fisheries, and forestry. These sectors are vital to livelihoods and contribute significantly to national income, but extreme weather events—such as floods and droughts—threaten their stability.

Micro and small enterprises (MSEs) are crucial to global economies, especially in Africa, where they account for up to 60% of employment and 40% of GDP. Despite their importance, MSEs are highly susceptible to climate-related disruptions due to their reliance on natural resources and limited financial and adaptive capacities. As key players in global supply chains, which contribute significantly to greenhouse gas emissions, MSEs must play a central role in climate action and resilience-building.

This report examines the challenges and opportunities for enhancing the climate resilience of MSEs, focusing on Africa, and highlights strategies that can help these enterprises adapt to climate change while contributing to broader sustainability efforts.



Purpose and Objectives of the report

- Assess the level of climate change awareness among MSEs.
- Evaluate the readiness and skills of MSEs for climate action.
- Identify current practices and challenges faced by MSEs.
- Propose solutions to facilitate climate action among MSEs

SCOPE OF THE STUDY

The study focuses on micro and small enterprises (MSEs) across several key industries in Africa, including agriculture, manufacturing, creative industries, and tourism. These industries are particularly vulnerable to the adverse effects of climate change due to their reliance on natural resources and exposure to environmental risks like droughts, floods, and extreme weather events. Waste management and plastic usage in creative industries, along with recycling initiatives in manufacturing, are also explored as areas of interest.

Definition of Climate Change: For the purpose of this study, climate change refers to long-term shifts in temperature and weather patterns, largely driven by human activities such as burning fossil fuels. Key agents of climate change impacting MSEs in Africa include drought, floods, waste generation, plastic pollution, and poor recycling practices. These environmental changes directly influence business operations by disrupting supply chains, increasing production costs, and threatening local ecosystems.



Foundational Insights

Fossil fuels account for 75% of global greenhouse gas emissions and 90% of carbon dioxide emissions, making them the primary drivers of climate change. Reducing reliance on fossil fuels is crucial for achieving global emission reduction targets.

Understanding Climate Change and Its Impact on MSEs

Climate change, driven primarily by the burning of fossil fuels like coal, oil, and gas, is the most significant environmental challenge of our time. Fossil fuels account for over 75% of global greenhouse gas emissions and nearly 90% of all carbon dioxide emissions, contributing to global warming and severe disruptions in weather patterns. Climate change affects MSEs primarily through increased frequency of extreme weather such floods, droughts, and heatwaves

In Africa, these events threaten industries like agriculture and manufacturing, which depend heavily on stable climate conditions. The absence of comprehensive waste management and recycling systems in many regions further exacerbates the problem, leading to environmental degradation and higher operational costs for businesses. The study specifically examines how waste generation, particularly in creative industries and plastic usage, impacts these enterprises.



Climate Change Awareness

For this report, MSEs understand climate change in the following ways:

1

MSEs recognize how global warming and environmental degradation affect their operations, supply chains, and long-term business viability.

2

MSEs understand key drivers like fossil fuel consumption and deforestation, which contribute to climate change.

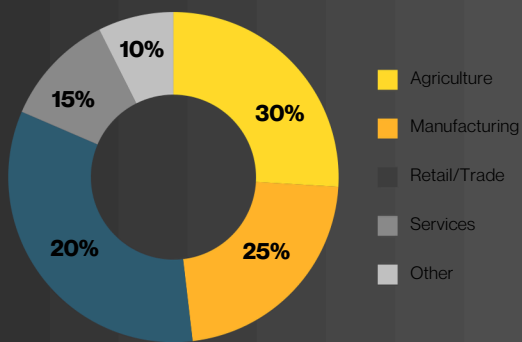
3

MSEs are aware of sustainable solutions such as renewable energy adoption, waste reduction, and better resource management to mitigate climate impact.

Methodology

RESEARCH APPROACH

The study employed a mixed-methods approach to investigate the impact of climate change and sustainability challenges on micro, small, and medium-sized enterprises (MSEs) within the Lagos metropolis. Conducted by Quantum Intel Africa (QIA), the research involved a survey of 150 MSEs across key sectors, including agriculture, manufacturing, retail/trade, service industry and other sectors.

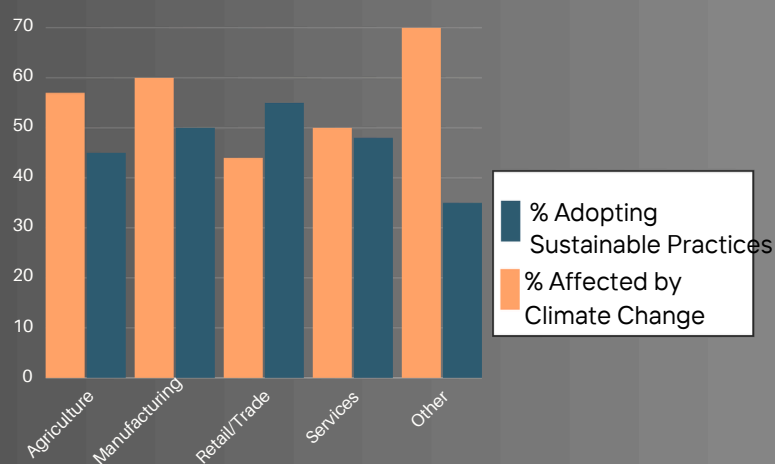
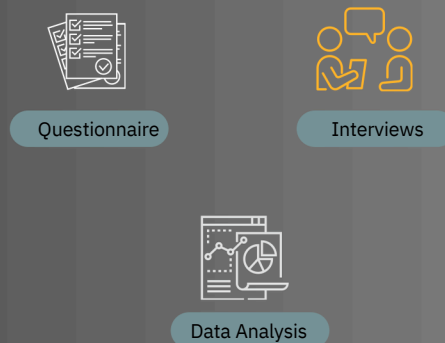


DATA ANALYSIS

Data analysis combined quantitative and qualitative methods. Survey data were statistically analyzed to identify trends, such as the percentage of MSEs affected by climate change or adopting sustainable practices. Interviews added context, highlighting specific challenges and strategies businesses are using. This approach provided a comprehensive view of how MSEs are impacted by and responding to climate change.

DATA COLLECTION METHODS

The methodology combined quantitative data collected through structured questionnaires and qualitative insights gathered from in-depth interviews. This approach enabled a comprehensive evaluation of both the climate-related challenges faced by these businesses and their approaches to adopting sustainable practices.

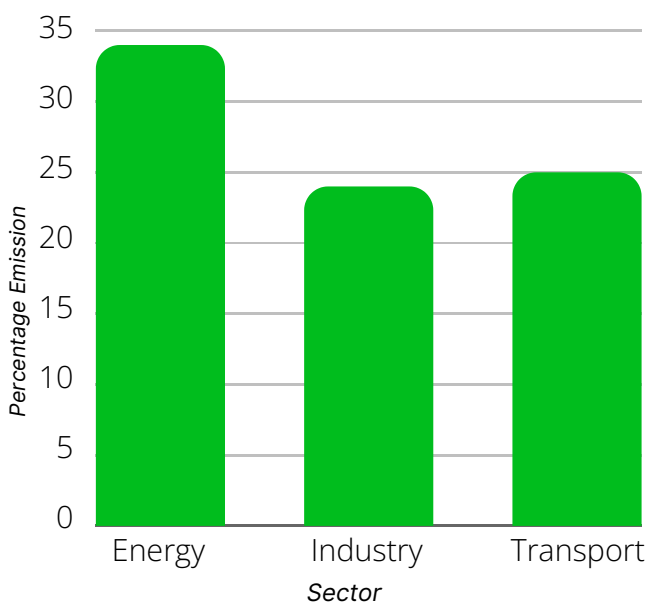


The analysis highlights varying impacts of climate change across sectors, with differing levels of adoption of sustainable practices.



The Role of MSEs in Addressing Climate Change

MSEs, despite their small size, play a significant role in global emissions, particularly through energy consumption, manufacturing, and transportation. The United Nations (2023) notes that energy, industry, transport, buildings, agriculture, and land use are among the primary sectors responsible for greenhouse gas emissions². MSEs are integral to these sectors, meaning that their collective actions can substantially impact global efforts to mitigate climate change.



Source: UN Fact Sheet Climate Change

- Energy: 34% (largest emitter when including power and heat generation).
- Industry: 24% (direct GHG emissions from processes, combustion, and waste). Transport: 25% (direct emissions from fuel combustion in vehicles, aviation, and shipping).

Micro and Small Enterprises (MSEs) have a unique opportunity to contribute to climate action:

- By adopting sustainable practices and innovating at the grassroots level.
- Shifting to renewable energy, improving energy efficiency,
- By using low-carbon technologies, MSEs can reduce their carbon footprint and help meet global emissions reduction targets.

The International Trade Centre (ITC) notes that MSEs embracing green business practices can enhance product quality, access new markets, and benefit from green financing. With the increasing focus on sustainability, MSEs that prioritize climate action can gain a competitive edge by aligning with consumer preferences and regulatory requirements

Challenges and Opportunities for MSEs in Climate Action

This section explores the critical challenges posed by climate change to MSEs, highlighting the urgent need for action while presenting the immense opportunities for innovation, renewable energy adoption, and increased financial support to drive a sustainable, resilient future (United Nations, 2022).



MSEs AND CLIMATE ACTION

Temp. could exceed 3°C

MSEs face a looming climate crisis as global temperatures continue to rise, threatening ecosystems and livelihoods. Human activities have led to a near 50% increase in CO2 emissions since 1990, worsening the crisis.

Action required: If global emissions are not reduced by half by 2030, temperatures could increase beyond 3°C, exacerbating floods, droughts, and food insecurity.



RENEWABLE ENERGY SOURCES

Global fossil fuel: 75%

Fossil fuels account for 75% of greenhouse gases, while renewable energy sources like solar, wind, and hydropower have the potential to supply 90% of the world's electricity by 2050. Investing in renewables can decarbonize the energy sector and mitigate climate change.

Solution: Switching to renewable energy is essential for reducing emissions and ensuring a sustainable future.



GREEN TECHNOLOGIES

To reduce emissions; invest in green tech

Investments in green technologies, such as solar panels and electric vehicles, are crucial for the transition. In 2020, renewable energy prices dropped significantly, with solar power costs down by 85% and wind energy by over 50% in the last decade.

Solution: Adopting sustainable technologies helps reduce emissions, promotes health, and creates millions of jobs.



SUPPORT MECHANISMS

Climate Finance: \$803 billion annually by 2020

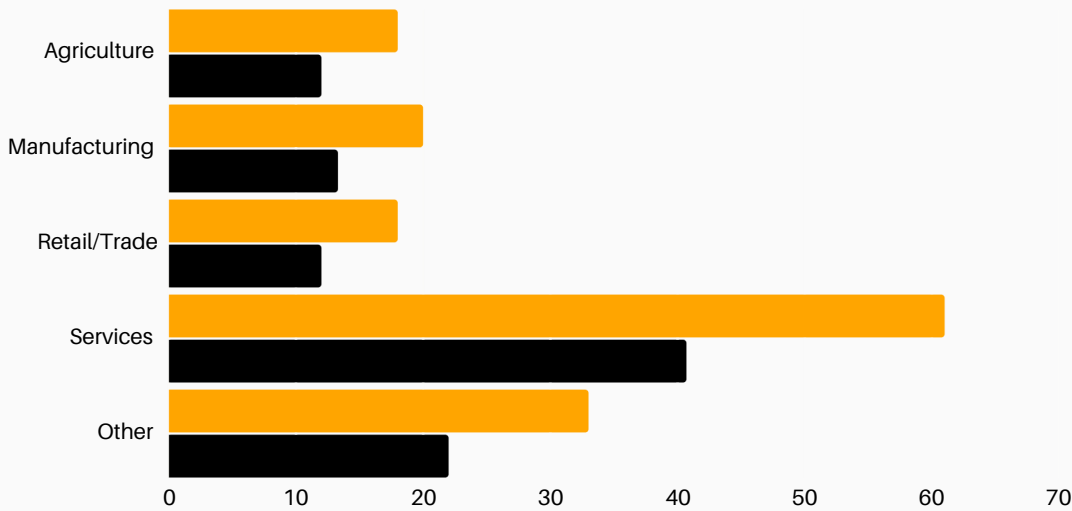
Climate financing reached an annual average of \$803 billion in 2020, but it still falls short of what's required to limit warming. Global efforts must focus on increasing support, especially in highly vulnerable regions.

Action: Governments and investors need to scale up support for climate resilience in developing regions.



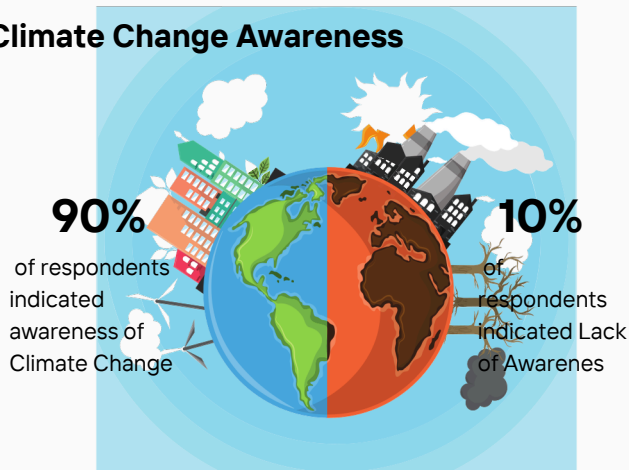
Findings at a Glance

Sector Participation Distribution

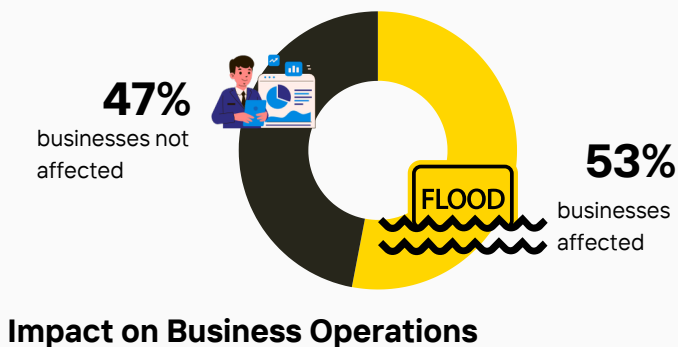
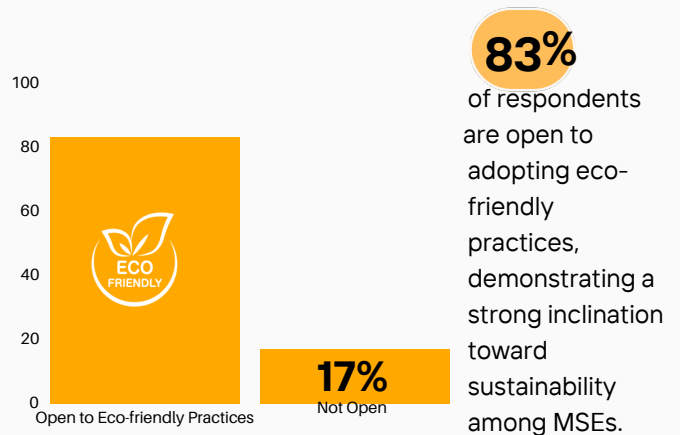


The service sector had the highest participation (40.7%) as its broad industry range often faces fewer immediate climate risks, which may allow businesses to allocate more attention and resources to participating in surveys like this.

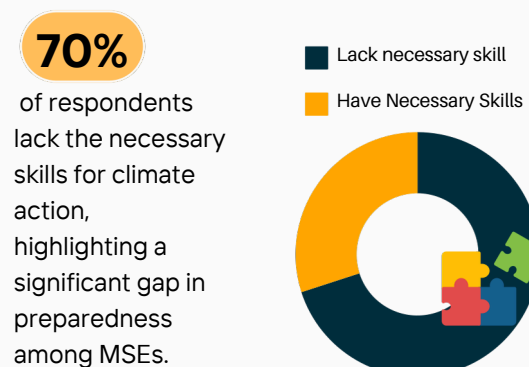
Climate Change Awareness



Openness to Eco-friendly Practice



Impact on Business Operations



Skills for Climate Action

FINDINGS AND ANALYSIS

The survey provided several key insights into how MSEs perceive and are affected by climate change:

70% of respondents lack the necessary skills to take effective climate action indicating a need for skill-building initiatives

Climate Change Awareness

90% of MSEs are aware of climate change, largely driven by the recent severe flooding in regions like Maiduguri, Delta, Bayelsa, Benue, and Lagos states, which have disrupted businesses. This awareness highlights the recognition of risks like flooding, improper waste management, and clogged drainage systems. Despite this, 70% of respondents lack the necessary skills to take effective climate action, indicating a need for skill-building initiatives.



Impact on Business Operations

53% of businesses reported being directly affected by climate change, particularly in sectors like agriculture, tourism, and manufacturing, due to flooding, increased waste disposal costs, and infrastructure damage. The other 47% have not experienced significant impacts, possibly due to location or the nature of their operations, which are less susceptible to environmental disruptions. This underscores the importance of sector-specific climate resilience strategies.

Openness to Eco-friendly Practices

83% of respondents are willing to adopt eco-friendly practices like recycling, waste reduction, and energy-efficient measures. Businesses that have been affected by climate change (53%) appear more motivated to adopt sustainable strategies. The remaining 17% of businesses not open to such practices may lack awareness of long-term benefits or face operational challenges that make sustainability difficult to implement.



Recent floods in Nigeria - Maiduguri. (Credit: ImramX,)

DISCUSSION

Interpretation of Findings

The survey reveals that while 90% of MSEs are aware of climate change, only 30% feel equipped to take effective action. Despite 83% openness to adopting eco-friendly practices, only 53% have been directly impacted by climate change. This gap highlights the need for skills, resources, and infrastructure to turn awareness into action. These findings align with global studies, such as those by the ILO and World Bank, which show that MSEs in developing nations face similar barriers—recognizing climate urgency but lacking technical and financial capacity to act. This underscores the need for targeted training and financial support.



Implications for Policy and Practice

CLOSING THE SKILLS GAP

The need for climate action training is evident. Tailored programs that teach practical, actionable solutions are crucial to enable MSEs to implement sustainability measures like **energy efficiency and waste reduction**.

INCENTIVIZING CLIMATE ACTION

Financial constraints are a major obstacle for MSEs seeking to adopt sustainable practices. **Solutions like green loans, subsidies, and tax incentives** could make eco-friendly transitions more affordable and achievable for small businesses.

LOCALIZED CLIMATE POLICIES

Government policies need to be adaptive, aligning with global climate goals while addressing the unique needs of MSEs. **Energy access, renewable energy, and waste management should be key focus areas** to facilitate meaningful contributions to climate resilience.

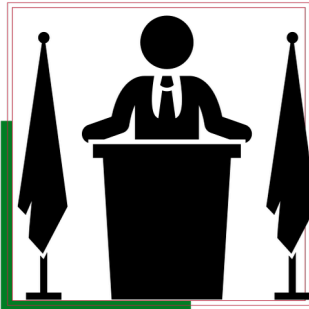
RESILIENT INFRASTRUCTURE DEVELOPMENT

Gaps in infrastructure, such as energy and water systems, exacerbate the difficulties MSEs face. **Investments in resilient infrastructure, particularly clean energy**, will reduce operational costs and enable businesses to align with national climate goals.



RECOMMENDATIONS

The recommendations focus on empowering MSEs with targeted policies, financial support, and practical knowledge to enhance their climate action and sustainability efforts.



Government Policy Initiatives

Provide subsidies and tax breaks for adopting green technologies like solar panels and recycling systems, and introduce climate reporting requirements to ensure small businesses have action plans in place. Clear, measurable climate targets for MSEs should be developed in collaboration with industry leaders.



Enhancing Access to Finance

A dedicated Green Finance Fund can offer low-interest loans or grants for sustainable investments, while fintech and microfinance institutions can develop tailored financial products to support MSEs in their climate initiatives.



Knowledge Enhancement Programs

Comprehensive training programs are essential to bridge the 70% skills gap, focusing on practical climate solutions. Partnering with international organizations and creating mentorship opportunities can enhance MSEs' capacity to act sustainably.



Environmental Awareness Campaigns

Tailored campaigns that highlight the financial and operational benefits of sustainability can motivate MSEs to act. Partnering with local business associations can ensure these campaigns are relevant and impactful.




Waste Management and Recycling Strategies

Localized, scalable waste reduction programs should be made accessible to MSEs. Certifications for sustainable practices can also provide a competitive advantage while addressing climate goals.

CONCLUSION

In conclusion, MSEs are crucial to the global fight against climate change, yet they face significant barriers in turning awareness into action. While the survey highlights strong climate awareness and willingness to adopt sustainable practices, challenges such as limited skills, financial constraints, and infrastructure gaps hinder progress.



By addressing these challenges through tailored policies, financial support, and practical knowledge programs, MSEs can become powerful contributors to climate resilience. A collaborative effort among governments, financial institutions, and industry bodies will be essential to ensure these businesses not only survive but thrive in a rapidly changing world.



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