

SUSTAINABILITY IN THE COTTON AND TEXTILE VALUE CHAIN: BALANCING ECONOMIC GROWTH AND ENVIRONMENTAL RESPONSIBILITY IN AFRICA



INTRODUCTION

Africa holds over 20 percent of global cotton-producing land yet contributes less than 5 percent to global textile and apparel exports. Africa's cotton and textile industries possess transformative economic potential—anchoring rural livelihoods, creating industrial jobs, and contributing to regional trade and GDP. Yet, the sector is at a crossroads. While it continues to power national economies, its environmental footprint and social inequities are increasingly under scrutiny. Cotton cultivation is highly water and pesticide-intensive, while manufacturing processes often release harmful pollutants through dyeing and chemical waste (UNEP, 2023). Social issues, including low wages, labor exploitation, and gender inequality, persist across both farming and factory workforces (Connell & Kozar, 2017). These concerns underscore the need for a shift toward practices that balance economic advancement with ecological and social responsibility.

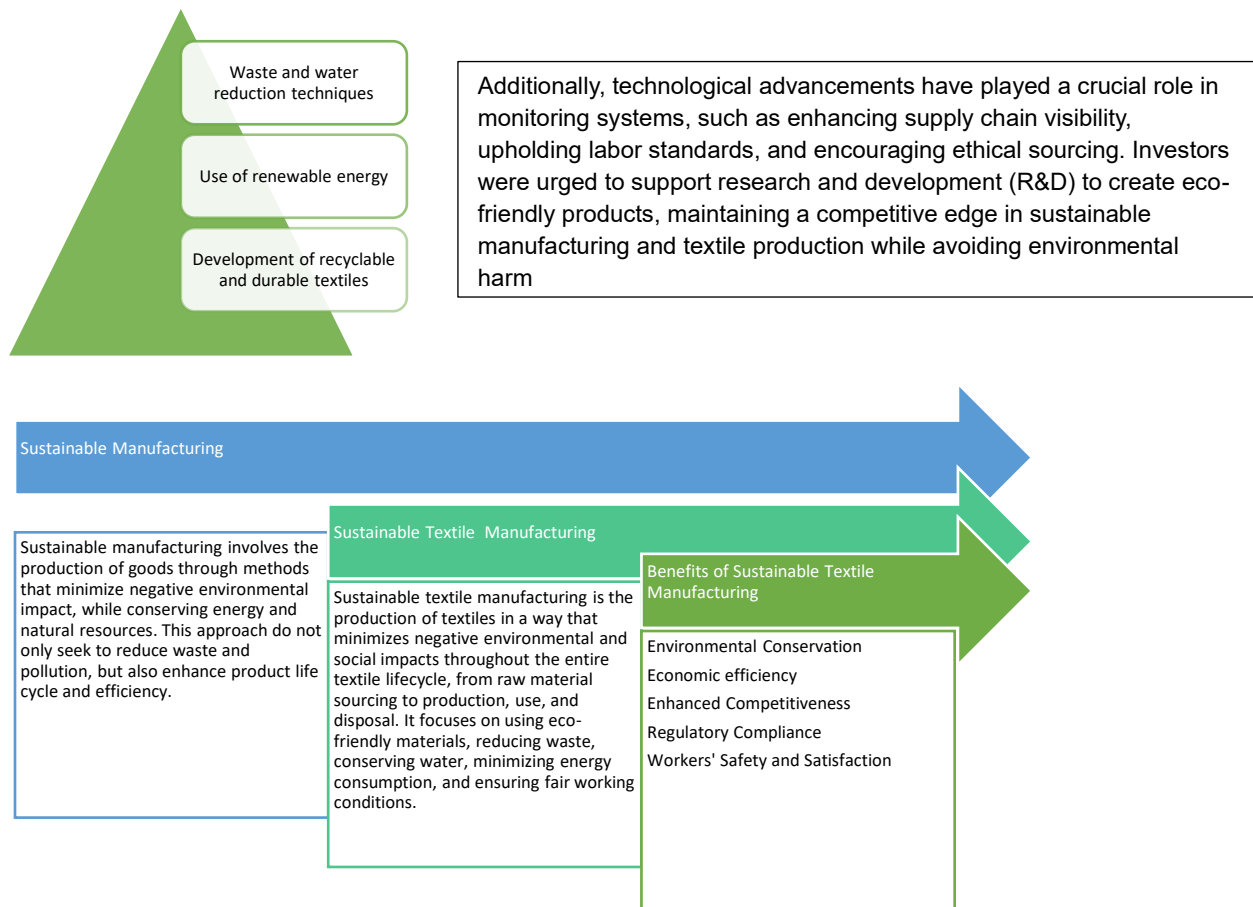
In recent years, sustainable practices have gained global traction while demand for ethically manufactured textiles has increased. This should allow Africa to reposition its competitiveness by building circular economy values into the CTA value chains. With over 60 percent of the continent's population under 25, and abundant natural resources including cotton, sisal, and jute, the foundations for a globally competitive, sustainable textile industry are present—but underutilised. The African Continental Free Trade Area (AfCFTA) provides a united policy framework for regional value chain integration, intra-African cotton and garment trade operations and decreased dependency on foreign raw material imports. There is an opportunity to make environmental performance even better through sustainable agriculture, green manufacturing technology, and digital tracing solutions that are also beneficial for improving transparency and alignment with global standards.



This policy brief draws from the insights from the International Trade and Research Centre (ITRC) webinar hosted in March 2025 titled "Sustainability in the Cotton and Textile Value Chain: Balancing Economic Growth and Environmental Responsibility in Africa," where leading experts and stakeholders gathered to identify opportunities for a sustainable, fair, and internationally competitive African textile sector. The key theme of discussions was the role of producers and regional institutions in sustainable trade.

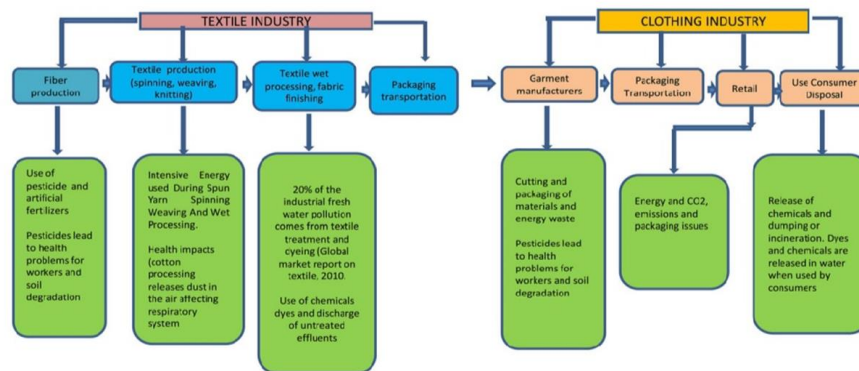
SUSTAINABLE MANUFACTURING: THE ROLE OF PRODUCERS IN RESPONSIBLE TEXTILE PRACTICES

The textile industry focuses on the production and manufacture of yarn, fabrics, and clothes and uses processes of either natural fibers or man-made fibers. It is the first stage of industrial development of any nation. Globally, it has a market share of US\$1 trillion, contributing 7% to world exports and employing approximately 35 million people worldwide (Global Market Report on Sustainable Textile, 2010). Producers thus have a major role in ensuring ethical textile production practices. Sustainable production models include:



According to the European Commission (2021) and Morlet et al. (2017), the textile and apparel industries generate 8-19% carbon emissions and 20% industrial wastewater pollution. The

production processes behind textiles are often resource-intensive, contributing to pollution, waste, and labor exploitation.



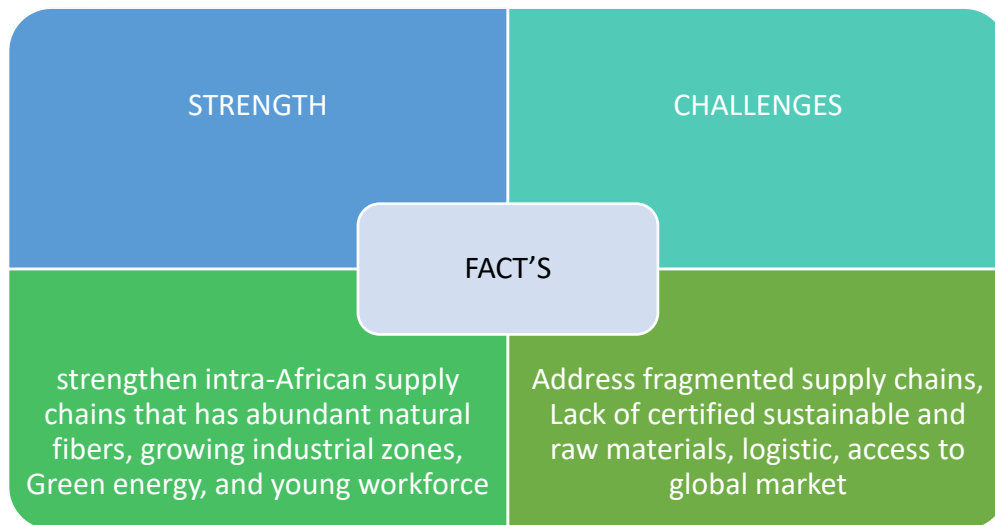
(Adapted with changes from Gardetti and Torres 2012; UNDP Report 2012)

Sustainable textile practices enable African countries to utilise local resources and traditional knowledge while also investing in modern technologies to promote economic growth and environmental sustainability.

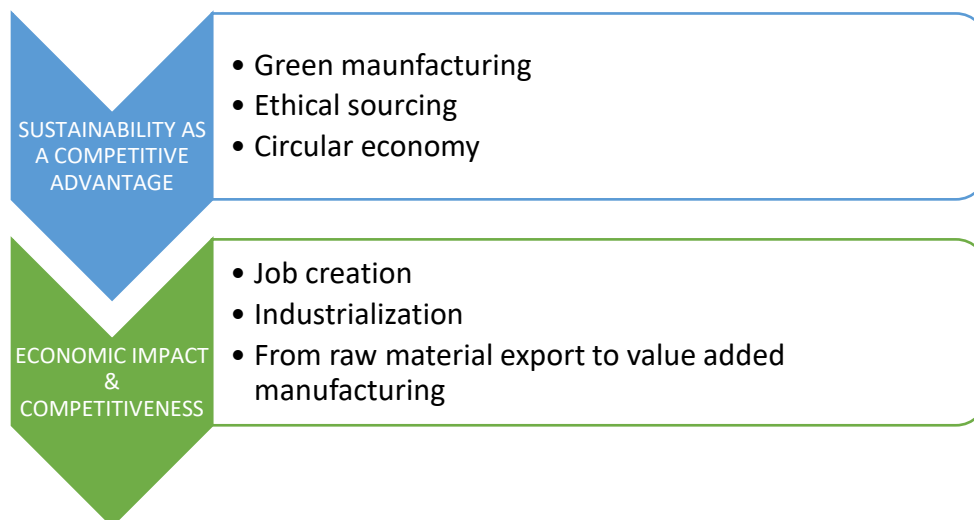
REGIONAL COLLABORATION FOR SUSTAINABLE TEXTILE PRODUCTION AND ECONOMIC COMPETITIVENESS

Africa holds significant potential for textile production, but realising this potential requires strong regional collaboration to foster sustainability and enhance global competitiveness. The continent is strategically positioned as a hub for global sourcing, boasting one of the largest and most diverse textile industries. With a young, growing, and adaptable workforce, Africa is poised to drive textile manufacturing forward. This presents a unique opportunity to establish sustainable and competitive manufacturing across the continent.

It is crucial to emphasise that harmonising sustainable policies through regional collaboration can tackle the challenges posed by fragmented production systems, low levels of intra-regional trade, and overlapping standards. Such efforts will not only reinforce the African textile landscape but also create a more unified and robust industry.



Therefore, it is recommended that the coordination of collaborative sustainability policies among regional communities and member countries of the regional bloc can create a common market that attracts foreign investment into the sector, with the following impact:

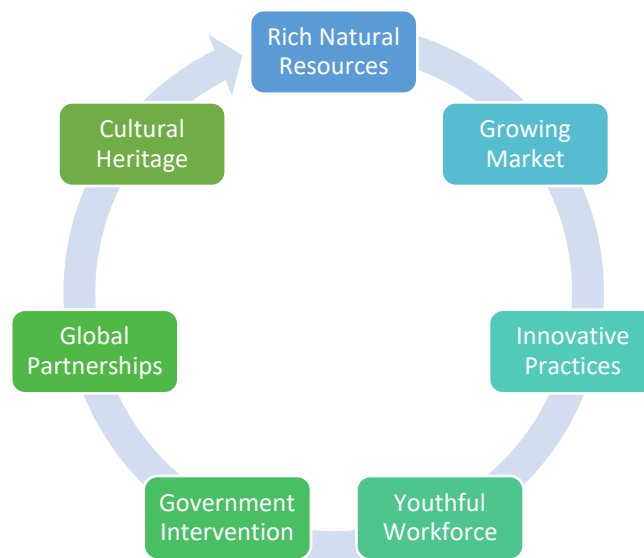


The call to action is for African countries to utilize regional agreement instruments such as the African Continental Free Trade Area (AfCFTA) to drive green industrialization, environmental compliance, and responsible manufacturing. This collaborative effort should also be between the government, businesses, and international buyers to strengthen sustainable textile sourcing in intra-Africa.

IMPACT ON SUSTAINABLE TRADE IN AFRICA'S COTTON AND TEXTILE SECTORS

Sustainability presents a unique opportunity to boost Africa's participation in the global textile trade and increase its less than 1 percent share of global apparel exports. Integrating sustainability across the value chain—from raw material cultivation to garment exports—will align African producers with the growing global demand for green textiles.

Key Enablers for Africa's Sustainable Market Integration:

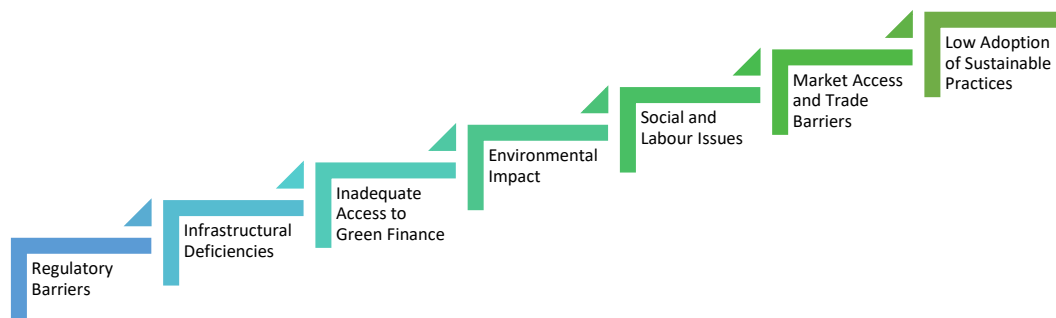


- Abundant natural fiber supply of natural fibers like cotton, sisal, and jute in Africa.
- The rapidly growing market and demand for sustainable and ethically produced textiles are increasing, reflecting a broader shift towards conscious consumerism.
- Innovative eco-friendly practices that embrace cutting-edge, eco-friendly manufacturing processes alongside circular economy models that prioritize sustainability and reduce waste.
- A skilled, youthful workforce fused with new ideas and creativity can enhance Africa's CTA sector.
- Supportive government policies and substantial government investments can foster an environment conducive to adopting sustainable practices within the textile industry.

- Strategic global partnerships with international organizations through knowledge sharing and technology transfer will strengthen the commitment to sustainability.
- Rich cultural heritage, craftsmanship, and traditional designs not only enhance product output but also contribute significantly to the diversity and richness of African textiles.

Despite these strengths, structural barriers remain. Regulatory inconsistencies, infrastructure gaps, and limited access to green finance hinder sustainable transformation in the African textile sector, which limits foreign market access. African apparel makers have to become intentional in meeting the sustainability certification benchmarks if they want to compete overseas.

Challenges Hindering Sustainability in Africa's Textile Sector



i. Regulatory Barriers

The absence of harmonised sustainability standards and varying regulations across African countries creates uncertainty for producers and investors. Bureaucratic procedures for obtaining sustainability certifications and ineffective enforcement mechanisms also slow down the adoption of responsible practices. Companies struggle to adapt to international sustainability standards without coherent and consistent policies.

ii. Infrastructural Deficiencies

The African textile production industry suffers from severe infrastructural problems, including unstable power supply, weak transport system, and outdated machinery tools. These lead to

expensive production, inefficiency, and an increased negative impact on the environment. There are also a few waste treatment facilities, thereby making the adoption of circular economy designs difficult, and leading to pollution and loss of resources.

iii. Inadequate Access to Green Finance

The SMEs and farmers encounter difficulties accessing green finance due to the high interest rates, stringent loan conditions, and low levels of awareness of the available finance. The financial institutions consider sustainable textile investment risky, thus preventing businesses from adopting environmentally friendly practices, investing in green technology, or achieving global sustainability standards.

iv. Environmental Impact

The textile sector is resource-intensive and requires large amounts of water and energy while contributing to pollution through chemical dyes and wastewater discharge.

v. Social and Labour Issues

Poor wages, gender disparities, and bad working conditions are widespread, particularly among garment workers and smallholder cotton producers.

vi. Market Access and Trade Barriers

Access to the global market is hindered for African manufacturers due to a failure to achieve sustainability standards and weak linkages to the value chain.

vii. Low Adoption of Sustainable Practices

Lack of incentives, technical competence, and investments has discouraged the application of eco-friendly production techniques.

Our Call to Action



Support sustainable cotton initiatives



Invest in sustainable textile technologies



Promote transparency and traceability in the textile supply chain



Empower cotton farmers and textile workers



Prioritize the development of domestic funding mechanisms and regional collaborations to drive sustainable growth

Africa must not replicate polluting models of industrialisation. Rather, it should leapfrog into clean industrial development, using tools like green procurement policies, zero-waste zones, and regional certification bodies. Without immediate reform, Africa's textile sector risks being locked out of emerging green markets and new trade frameworks where sustainability standards are non-negotiable.

- i. **Promote Green Cotton Cultivation:** Encourage organic and regenerative means of cotton cultivation to reduce pesticide usage, conserve water, and increase soil quality. Provide incentives through training and finance to smallholder farmers adopting the green trend.
- ii. **Strengthen Regional Value Chains:** Develop domestic processing capacities for the textile sector in a bid to reduce reliance on the importation of raw materials onto the continent and increase intra-African trade under the AfCFTA.
- iii. **Adopt Circular Economic Models:** Adopt textile recycling and waste management practices to reduce environmental pollution and create economic opportunities in the reuse and upcycling sectors.
- iv. **Enable Improved Compliance with International Sustainability Norms:** Permit African textile industries to obtain respective certifications to tap high-value overseas markets and maintain environmental and moral standards.
- v. **Invest in Green Energy Solutions:** Promote the use of renewable energy resources such as solar and hydropower in textile production to reduce carbon emissions and operational costs.
- vi. **Support Research and Innovation:** Stakeholders should promote research into sustainable textile alternatives and innovative production technologies that reduce environmental impact.
- vii. **Facilitate Access to Green Finance:** Governments and financial institutions should develop funding mechanisms, such as green bonds and sustainability-linked loans, to help textile producers transition to eco-friendly practices.

Conclusion

Africa stands at a critical juncture in reimagining its cotton and textile sector. The textile industry in African countries can reach new levels of competitiveness and stability by combining sustainable practices with regional industrial collaboration. Through this strategic policy alignment, regional cooperation, and stakeholder investment, the continent can meet global

sustainability standards and also position itself as a leader in ethical, eco-friendly textile production. The moment to act is now—sustainability is not just a necessity; it is Africa's competitive edge.

ABOUT THE CONTRIBUTORS

- **Oluwambe Akinmoye, PhD** - Department of Fine and Applied Art, Mountain Top University, Prayer City, Nigeria. oakinmoye@mtu.edu.ng
- **Ms. Nursema Cil** - Head of Africa Sourcing, Otto International Scan Thor. Present in 30+ countries through 123 major companies, Revenue of 16.2 billion Euros in 2022/23, Commitment to carbon neutrality by 2030 Commitment to sustainable fiber, Cotton Made in Africa (CMiA), Transforming 30 traditional brands into e-driven companies, Employs over 40,000 people worldwide
- **Ms. Dalia Rady** - Board Member of Egypt Cotton Association, Former Executive Director of Egypt's Textile Export Council, Academia, Development projects, NGOs, Governmental & Quasi Governmental Organizations, financial institutions, and private sector, Leading a team in the USAID TRADE Project and Hesni Textiles, Enhancing export capabilities and sustainable development

COORDINATORS AND EDITORS

- **Sand Mba-Kalu** – Founder, International Trade and Research Centre
- **Ms. Abigael Feranmi Ayeni** – Research Associate, Africa, Cotton, Textile and Apparel Center, at International Trade and Research Centre

ABOUT THE HOST INSTITUTION

International Trade and Research Centre (ITRC) - *Africa Cotton, Textile and Apparel Centre*

The Africa Cotton, Textile and Apparel Centre functions as a hub for facilitating policy dialogue, research, and promoting collaborative initiatives that enhance intra-African trade, investment,

market access, and industrialisation. The Centre prioritise capacity building, evidence-based policy, and upgraded manufacturing capabilities to support sustainable practices and innovative solutions within the cotton, textile, and apparel sectors. Its objective is to equip industry stakeholders with the requisite tools and knowledge to address contemporary challenges, improve supply chain efficiency, and enhance market access. Ultimately, these efforts contribute to the economic development of the continent.

REFERENCES

Connell, Kim Y. H., & Kozar, J. M. (2017). Introduction to special issue on sustainability and the triple bottom line within the global clothing and textiles industry. *Fashion and Textile*, 4(16), 1-3. doi:DOI 10.1186/s40691-017-0100-6

UNEP. (2020). UN Environment Programme (2020). Sustainability and Circularity in the Textile Value Chain - Global Stocktaking. Nairobi, Kenya.: UN Environment Programme .

UNEP. (2023). Sustainability and Circularity in the Textile Value Chain - A Global Roadmap. Paris: United Nations Environment Programme.

WWW.IT-RC.ORG | +234-8180381825

@COPYRIGHT - THIS IS THE PUBLICATION OF THE AFRICA COTTON, TEXTILE AND APPAREL CENTRE (AFRICA CTA CENTRE) AT THE INTERNATIONAL TRADE AND RESEARCH CENTRE (ITRC). FOR ADDITIONAL INFORMATION: CONTACT@IT-RC.ORG