



Leather Manufacturing and Production in the Informal Sector: A Pathway to Youth Employment and Sustainable Livelihoods in Zaria Metropolis, Kaduna State, Nigeria

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Abstract

Leather manufacturing remains one of Nigeria's most promising labour-intensive industries, yet its informal segment continues to dominate employment generation in northern urban centres like Zaria Metropolis, Kaduna State. Anchored at the Nigeria Institute of Leather and Science Technology (NILEST), Zaria's informal leather value chain spanning traditional tanning, footwear design, bag production, and artisan accessories serves as a critical buffer against youth unemployment while leveraging abundant livestock resources. This case study interrogates how informal leather production absorbs young people (18–35 years), fosters self-employment, and supports sustainable livelihoods amid structural constraints. Drawing on empirical evidence from NILEST program evaluations, National Bureau of Statistics labour surveys, and recent sector reports, the analysis reveals that NILEST-led footwear and leather goods training has equipped thousands of youths with marketable skills, resulting in improved self-employment rates and household income. However, persistent challenges low technology adoption, inconsistent raw material quality, environmental degradation from traditional tanning, gender disparities, limited finance access, and weak market linkages constrain scalability and productivity. Digital skills integration and entrepreneurship modules have enabled hybrid informal-formal models, yet outcomes remain modest without stronger policy support. The chapter diagnoses these realities while prognosticating that technology transfer, microfinance, sustainable tanning innovations, and value-chain integration can transform the informal leather sector into a driver of inclusive growth. Lessons for African development underscore the value of institution-led vocational training, community-based innovation, and gradual formalization in similar livestock-rich contexts. Recommendations emphasizes scaling NILEST programs, public-private partnerships, gender-transformative approaches, and environmentally sustainable practices to unlock the sector's \$1 billion potential by 2025 and beyond.

Keywords: *Informal leather sector, youth employment, NILEST Zaria, footwear production, sustainable livelihoods, digital integration, African development, Nigeria*

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Introduction

Africa's leather industry embodies a classic pathway for converting indigenous resources into economic value, yet in Nigeria it remains overwhelmingly informal, particularly in northern hubs such as Zaria Metropolis. Bachewe, (2022), with Nigeria's youth population facing unemployment rates exceeding 40% in some northern states and the informal sector absorbing over 80% of young workers, leather manufacturing rooted in abundant hides and skins from livestock offers accessible, skill-based livelihoods. Zaria, home to the Nigeria Institute of Leather and Science Technology (NILEST), combines historical artisan traditions with institutional training, making it a strategic case for examining informal leather production as a sustainable employment pathway. This chapter aligns with emphasis on economic issues and pathways to sustainable growth. It presents a real-world case study of Zaria's informal leather value chain, providing background on its contributions, empirical analysis of interventions and outcomes, and practical lessons for African development. By interrogating recent evidence, the study highlights both transformative potential and structural barriers, offering nuanced insights for policymakers, academics, and practitioners committed to harnessing youth energy for inclusive progress. The informal leather sector encompasses unregistered small-scale activities in tanning,

cutting, stitching, and finishing of hides into footwear, bags, and accessories (Muhammad 2025). In Zaria, it capitalises on local livestock supplies and NILEST's expertise to absorb school leavers and graduates excluded from formal markets. Empirical data confirm that vocational leather training significantly boosts self-employment: NILEST programs have trained over 6,000 youths nationwide in footwear and leather goods, with starter packs enabling business startups. Recent national assessments project the leather industry could generate over \$1 billion annually by 2025 through job creation and value addition, yet informal operators in northern clusters face disintegration in the local value chain, with much semi-processed leather exported raw rather than finished domestically. Digital skills initiatives (e.g., Click-On Kaduna) are bridging gaps by enabling e-marketing of leather products, while traditional apprenticeship systems persist alongside institutional training. However, challenges such as outdated technology, environmental degradation, and policy inconsistency mirror broader African informal manufacturing realities.

Methodology

This chapter adopts a case study design supported by content analysis of secondary sources including NILEST program evaluations, National Bureau of Statistics labour force surveys, World Bank digital skills reports, academic studies on northern

vocational training, and sector policy documents. Thematic coding identified patterns in contributions, barriers, intervention outcomes, and lessons. Quantitative indicators (training numbers, self-employment rates, income gains) complement qualitative narratives of youth experiences. The approach ensures empirical grounding, real-world examples, and direct relevance to African development as stipulated in the book guidelines.

Findings

Contributions of Informal Leather Manufacturing Informal leather activities in Zaria provide immediate income and skill utilisation for youths. NILEST’s footwear and leather goods programs have demonstrably increased self reliance, self-employment, with participants establishing micro-enterprises in shoe-making and accessories. These ventures enhance household consumption, including healthcare access, and preserve cultural crafts while incorporating modern designs.

Key Challenges

Operators face low technology adoption, inconsistent raw hides, power shortages inflating costs, environmental risks from traditional tanning, gender norms restricting women’s participation, and fragmented market access. Many enterprises remain subsistence-level, vulnerable to shocks.

Interventions and Outcomes

NILEST training, senator-sponsored programs, and digital-leather hybrids have yielded positive but uneven results: skill acquisition and startup rates improve among participants, yet sustainability depends on post-training support. Senatorial initiatives dispatched youths for specialized footwear training, reinforcing institutional impact.

Table 1: Leather Manufacturing Interventions for Youth in Zaria

S/N	Intervention	Target and Focus	Persistent challenges	Improvement
1.	NILEST Footwear & Leather Training	Youth 18–35; shoe-making, tanning, > 6,000 trained nationally ; self-employment gains	Technology access; raw material quality	Efficient supply of quality materials
2.	Senator-Sponsored Leather Works	Youth & women shoe production Hands-on skills enterprise startups	Small Scale, lack of follow-up and lack of monitoring	Proper monitoring designed programs for implementation.
3.	Digital Skills and Leather E-Marketing	Hybrid informal-formal models Broader market reach; income diversification	Digital divide and lack of infrastructure	Provision of digital design tools.

Discussion

Zaria’s informal leather sector exemplifies how vocational institutions can channel youth energy into productive livelihoods, yet findings must be

interrogated against recent scholarship to reveal broader patterns and gaps. Abdullahi (2024) documented significant self-employment impacts from NILEST footwear training, directly supporting this case's positive outcomes among participants; however, the study's modest scalability contrasts with national projections of \$1 billion potential by 2025 (NACETEM, 2024; BusinessDay, 2025), underscoring value-chain disintegration where semi-processed hides are exported rather than finished locally a challenge amplified in northern clusters like Zaria compared to southern hubs such as Aba (Udennaka & Ezechukwu, 2025).

World Bank (2023) evaluations of northern apprenticeships highlight leather trades as traditional yet under-modernised pathways, aligning with Zaria's reliance on NILEST yet critiquing exclusion of marginalised groups; the present case extends this by showing emerging digital integration (Click-On Kaduna) mitigating some gaps, though gender disparities persist as noted in Verivafrika (2024) analyses of informal manufacturing clusters in Kano and Kaduna. Muhammad (2025) on handcrafted North-Western entrepreneurship affirms sustainability potential through indigenous crafts, yet warns of low productivity without technology transfer echoing Zaria's environmental and efficiency barriers in traditional tanning.

Okoduwa et al. (2026) and Scienmag (2026) advocate biophysical/biochemical innovations for sustainable leather practices, directly interrogating this study's diagnosis: without such upgrades, Zaria's informal operators risk environmental degradation and lost competitiveness, contrasting

with successful hybrid models elsewhere in Africa. Alogala and Gimba (2023) emphasise entrepreneur skills acquisition at NILEST, reinforcing hybrid training outcomes, while ILO (2025) NEP reports on the informal economy underscore policy fragmentation as a continent-wide constraint limiting Zaria-like cases from achieving scale.

Bachewe, (2022) noted nonfood agricultural manufacturing (including leather) growing to 4.3% of employment by 2022, with youth and women driving gains consistent with Zaria's trends yet highlighting slower northern progress due to infrastructural deficits. Dashe (2025) positions leather goods as labour-intensive drivers of industrial development, challenging this case to advocate stronger public-private linkages for market access. Overall, the Zaria evidence nuances southern-focused studies (e.g., Aba clusters) by emphasising northern cultural and institutional strengths (NILEST anchoring), while exposing shared African challenges: technology gaps, gender inequities, and policy incoherence. These comparisons prognosticate that targeted, sustainable innovations and inclusive policies can elevate informal leather production from survival mechanism to transformative engine across the continent.

Conclusions

In the study informal leather manufacturing in Zaria demonstrates resilience as a youth employment pathway, yet its contribution to sustainable African development hinges on modernisation and inclusive support, these actions can harness leather's labour-intensive potential for equitable growth across Africa. The study therefore recommends:

1. Scale NILEST programs with sustainable addition.
tanning modules, digital marketing, and entrepreneurship to reach more youths.
2. Facilitate microfinance and modern equipment access via public-private partnerships for informal operators.
3. Mainstream gender-transformative strategies to boost women's participation in leather value
4. Promote gradual formalization through simplified registration, quality standards, and export linkages.
5. Invest in technology transfer and environmental innovations to enhance productivity and competitiveness, aligning with national \$1 billion targets.

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