PARADIGM SHIFT

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ALN Academy

BORDERS, BUDGETS & THE CLIMATE BETWEEN THEM

A provocative framing that reflects how trade, labour, and security are reshaping Africa's institutional and policy landscape—across national, fiscal, and environmental borders.

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What's Inside

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ABOUT
PARADIGM SHIFT

Paradigm Shift is ALN Academy's flagship monthly publication offering bold, thought-provoking insight into Africa's legal, political, and economic transitions. More than a newsletter, it is a pulse check on power—capturing the ideas, contradictions, and possibilities shaping governance and development across the continent. Each edition features curated analysis and original commentary from our team and an extended network of thinkers, legal disruptors, and policy minds. From courtrooms to boardrooms to the streets, *Paradigm Shift* meets readers where change is happening—unpacking the forces behind it, and what they mean for Africa's future. This isn't just about shifting paradigms. It's about rewriting them.

Sundays. Monthly. Always thought-provoking.

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From the Editor

Rutendo Nyaku
Rule of Law Advisor
ALN Academy

Dear friends,

We launch Paradigm Shift at a time when the geopolitics around borders and migration are at their height. In 2024 alone, Africans lost an estimated **€60 million ($67.5 million)** in non-refundable Schengen visa fees due to rejections. But mobility is also restricted within Africa: only **28% of countries offer visa-free travel** to fellow Africans, and nearly half still require a visa before arrival.

These trends are taking place within a malign context of high debt ceilings, migration flows, and the rising tide of climate change. So, it's why this issue's theme: *Borders, Budgets, and the Climate Between Them* is not metaphorical. It reflects the tangled realities African countries must now navigate: how to stay open in a world closing in, how to spend wisely in a time of austerity, how to adapt boldly to a changing planet and build prosperity.

With faith in democracy and its promise of economic prospertiy faltering across this great continent and the world, we felt it was critical to analyse what's really going on - and take an economic perspective to understand where to from here. This month's issue examines what it will take to rewrite the social contract in African countries — economically, environmentally, and institutionally.

In *Securing Development*, Chris Diaz surfaces an uncomfortable reality: Africa's budgets are bleeding into defence and debt repayment, while investment in people and systems is shrinking. He makes a fresh argument that often goes unsaid—security, in Africa, must be recast as a development tool, not a cost centre. Diaz shows that up to 70% of expenditure in some countries is swallowed by debt and defence, crowding out spending on infrastructure, health, and education. His call to action? Build fiscal resilience—not just through debt restructuring, but by embedding security into public investment and regional trade.

From the Editor

In *Labour Mobility and the Future of Work*, Rosa Nduati-Mutero, Leah Muhia, and Wendy Irungu unpack the often-overlooked link between migration and growth. Drawing from fresh IOM data, they remind us that 80% of African migration happens *within* the continent, not to Europe, as headlines suggest. Yet policy remains reactive, border regimes remain rigid, and young people, those most willing to learn, work, and innovate, are being blocked instead of backed. What makes this essay stand out is its quiet provocation: *labour mobility is not just about economics, but about trust in institutions, in people, and in the future.*

Finally, in *Regional Trade Agreements for Climate Adaptation,* Dambuza Tanatsiwa and Dr. Levious Chiukira bring climate policy down to earth. Using Madagascar as a case study, they argue that Africa's trade architecture must move from being climate *aware* to being climate *adaptive.* They propose that AfCFTA should prioritise environmental goods and integrate climate-smart industrialisation. Their essay seeks to flip the script by arguing that *adaptation isn't just about surviving climate shocks. It's about using trade to thrive in their midst.*

Taken together, these stories make a single argument: if Africa is to lead in the 21st century, it must master the choreography between movement, money, and meaning.

Thank you for joining us on this journey. We welcome your thoughts, critiques, and contributions. *Paradigm Shift* is a platform, not a podium—and we're just getting started.

Securing Development: Rebalancing Africa's Public Finance Architecture in the Face of Rising Insecurity

Chris Diaz

This article explores the complex relationship between security concerns and public financing in Africa. It argues that growing security threats—ranging from terrorism and political unrest to asymmetric warfare—are forcing global leaders and African governments to divert critical resources from development priorities.

This reallocation, while often necessary, threatens long-term economic growth, institutional legitimacy, and socio-political stability. The essay also proposes actionable strategies to help nations recalibrate their public finance architecture in ways that enable both development and security imperatives to be met.

Security spending is rising fast across Africa but the trade-off is stark.

As governments pour resources into military operations, law enforcement, and surveillance, investments in health, education, and climate resilience are pushed aside. This isn't just about shifting budget lines. It's about choosing or sacrificing the future.

The Cost of Security: A Structural Dilemma

Across the continent, rising insecurity is pushing African governments to devote increasing portions of national budgets to security-related expenditures. From military operations and law enforcement to latest surveillance systems and regional security coalitions, the scale of spending required is enormous. While this shift is understandable, it comes at a significant cost.

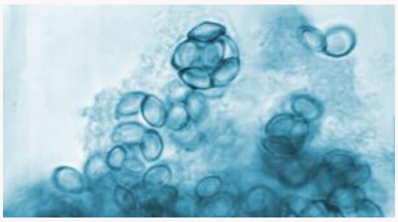
According to the IMF, conflict reduces growth by an average of 2.5 percentage points annually in affected African states. These losses translate into fewer jobs, reduced entrepreneurship opportunities, weakened services, and deteriorating trust in public institutions. The trade-off is stark. Investments in education, infrastructure, public health, and climate resilience—critical for inclusive development—are often the first to be sacrificed. This erosion of fiscal space hampers Africa's ability to harness its demographic dividend, stimulate innovation, and build sustainable economies. At its core, the issue is not just about budget lines—it's about the kind of future African states are building or undermining.

A Global Challenge, but with African Nuances

While the security-development trade-off is global in nature, Africa faces a uniquely complex convergence of vulnerabilities. In Latin America, violent crime has been shown to reduce economic activity by 4%, diminishing tax revenues needed for public services. But Africa's challenges are intensified by weak fiscal resilience, limited institutional capacity, and a fragile peace and security architecture.

African countries contend with a daunting mix of:

- Asymmetric warfare and cross-border terrorism, compounded by gaps in the African Peace and Security Architecture (APSA);
- Resource-draining military coalitions, such as the G5 Sahel Joint Force and the MNJTF, funded at the expense of development;
- Public health shocks like COVID-19, which blur the boundaries between health, economic, and security threats;
- Technological and intelligence gaps that prevent many African states from adopting modern security tools without external support.



At the same time, Africa's sovereign debt profile has worsened. The average debt-to-GDP ratio stands at about 68.6%, while more than half of African countries are either in or at high risk of debt distress, according to Afreximbank. Debt service-to-revenue ratios exceed 20% in many states, diverting resources from core services and exposing countries to fiscal shocks. Ghana, Zambia, and Ethiopia have all recently defaulted on external obligations, while debt from private creditors now represents over 54% of Africa's external debt—a dramatic shift that increases exposure to market fluctuations. Many would argue that even with the establishment of Africa's largest free trade zone—the AfCFTA—progress on infrastructure and strategic security investments to support seamless intra-African trade and global integration remains slow, especially when compared to the pace needed to unlock the continent's full economic potential.

The fiscal space needed to fund development has been crowded out. In some countries, up to 70% of total expenditure now goes toward debt servicing—as in perhaps, Mozambique's case—leaving minimal room for investment in social goods. Moreover, the social contract is weakening: the World Bank finds that most African households pay more in taxes than they receive in public services or subsidies, making fiscal policy regressive and eroding public confidence. This cycle of insecurity, fiscal erosion, and underdevelopment is not only an economic issue—it is a governance challenge. When states are perceived to invest more in arms than in people, it deepens fragility and fosters conditions where extremism and seemingly, unrest can take root. Without credible, inclusive, and transparent financial strategies, the legitimacy of public institutions will continue to be undermined. However, it may be debated that private sector that drives the GDP and economies by nearly 80 per cent coupled with PPP investments, the bottom line is and will move the continent progress forward.

Overlooked Potential: Investing in Secure Development Infrastructure

One domain where the development-security nexus can be turned into opportunity is aviation infrastructure. The aviation sector is projected to grow from 36 million departures to 60 million by 2030, and from 4 billion passengers to 16 billion annually by 2050. It contributes $2.7 trillion to global GDP, supports 62.7 million jobs, and facilitates humanitarian response and economic mobility. Estimated aircrafts flying the skies today are about 20000 and, in a few years, ahead over 40000 aircrafts will move and fly globally.

> Yet many African states underfund this vital logistics sector which demands more security investments and infrastructure development.

By investing in secure, efficient aviation ecosystems, African governments can unlock long-term socio-economic gains—while simultaneously building logistical capacity to respond to emergencies, safeguard borders, security services are critical and promote regional integration. The multi benefit of development and latest security investments, is crisp clear.

A Global Example: Norway's Balanced Model

Norway offers a blueprint for how prudent fiscal management and security investment can co-exist. Through robust international partnerships, preventive diplomacy, and collective security via NATO, Norway has pre-empted many threats. Critically, it leverages its Sovereign Wealth Fund to finance security and public goods without compromising macroeconomic stability.

While African countries cannot simply replicate this model, they can emulate its underlying principles: investing in resilience, saving during good times, and designing long-term fiscal buffers that allow for flexibility during crises. This includes not only sovereign wealth funds, but also mechanisms like medium-term revenue strategies (MTRS), contingency planning, and fiscal risk assessments as recommended by UNECA and the African Development Bank.

The Path Forward: Rebalancing Africa's Fiscal Architecture

To realign Africa's public finance systems with both development and security objectives, governments must:

Prioritise Preventive Security through Proactive Spending
Shift from reactive military deployments to early-warning systems, community policing, and inclusive economic interventions in fragile zones. These investments cost less and deliver more durable peace.

Introduce Debt-Security Compacts
African governments, multilateral institutions, and creditors should negotiate new fiscal frameworks that link debt relief or restructuring to targeted security-development investments. This could include clauses for reducing military expenditure in favour of education or health when conditions allow.

Rebuild Fiscal Buffers and Expand Domestic Resource Mobilisation
Governments must develop fiscal buffers and strengthen domestic tax capacity— without deepening inequality. This includes progressive taxation, reducing untargeted subsidies, and expanding the tax base through digital tools, as advocated by the World Bank and AfDB.

Embed Resilience into PFM and Crisis Response
As the AfDB suggests, African governments should integrate crisis-sensitive budgeting frameworks, develop counter-cyclical fiscal policies, and establish crisis-response units that allow for flexibility and quick reallocation of funds during shocks.

Reframe Africa's External Partnerships
African states must adopt a more strategic approach to foreign relations, positioning themselves not only as aid recipients or security beneficiaries but as co-investors in stability. Trade and diplomatic engagements with the US, China, and the EU should include clauses on co-financing regional security, technology transfer, and infrastructure resilience.

Conclusion: Toward a Smarter Security-Development Equation

Africa's ability to secure its future depends on its ability to fund that future wisely. Security cannot come at the expense of prosperity, just as prosperity cannot endure in the absence of peace. The challenge ahead is not just technical—it is profoundly political. It requires courageous leadership, regional cooperation, and a new social contract that puts people at the centre of public finance.

By rebalancing fiscal policy and reimagining security as a development enabler—not a budgetary drain—African governments can chart a course that is both safer and more sustainable.

Labour Mobility and the Future of Work in Africa Under AfCFTA


Rosa Nduati - Mutero


Leah Muhia


Wendy Irungu

Labour mobility refers to the ability of workers to move between jobs. It consists of changes in the location of workers both across physical space (geographical mobility) and across a set of jobs (occupational mobility) and unlike labour migration, it addresses the ease with which workers can move around an economy and between different economies.

This paper will delve into the dynamics of labour mobility across African nations, focusing on the current trends used to attract and retain skilled workers, the readiness of skilled labour markets and the opportunities for expatriate skill transfer throughout the continent. Part 2 of this paper will focus on the strategies that African countries have employed to attract and retain skilled labour and the lessons that can be drawn from their experiences. Part 3 will address how expatriates can contribute to local workforce development through skills transfer, mentorship and training programs. The next part of the paper will discuss the implications of varying work permit frameworks and national policies on labour mobility across Africa and how businesses can effectively navigate these regulations. The final section of this paper will present recommendations for the broader African continent to leverage the significant benefits of exploring and enhancing labour mobility under the AfCFTA.

The African Continental Free Trade Area (AfCFTA), which came into force on May 30, 2019, if effectively implemented, offers Africa an unparalleled opportunity to deepen trade relations, boost industrialization, and promote sustainable growth. Its primary goal is to eliminate tariffs on goods, facilitate trade in services and increase intra-African trade by creating a more economically cooperative and interconnected continent. In its preamble, the Agreement establishes the African Continental Free Trade Area referring to the aspirations of Agenda 2063 for a continental market. Central to these aspirations is among others, the free movement of persons which is crucial for deepening economic integration and structural economic transformation.
Labour mobility focuses on allowing skilled professionals to move across borders to fill gaps in various industries. By facilitating labour mobility, AfCFTA aims to harness Africa's vast human resource potential, promote knowledge transfer, and support the development of a labour market that can compete on a global scale.

At the same time, by allowing the seamless transfer of knowledge and skills across borders, AfCFTA can create a richer talent pool that supports long-term growth and resilience across the continent.

Despite the potential benefits that labour mobility promises to bring to the wider African Continent, it still remains underexplored within AfCFTA due to regulatory and logistical barriers.

The Dynamics of Labour Mobility in Africa

Labour mobility in the African continent is being shaped by the increasing demand for skilled professionals in various industries like technology and healthcare. The International Labour Organization (ILO), in one of its studies, states that "Labour Migration in Africa is largely intra-regional (80%) and that currently, there are few African countries not participating in migration flows, whether as countries of origin, transit or destination." Furthermore, the *World Migration Report (2020)* highlighted that over 21 million Africans were living in another African country. By 2024, this number had risen to nearly **25.4 million**, indicating a steady increase in intra-African labour mobility. The increase of labour migration can be attributed to the easing—to some degree—of migration restrictions and the growing implementation of the free movement of persons between partner states. The big question is: are African countries doing enough?

Over the last few years, the competition for skilled labour has intensified as countries aim to build robust economies and address challenges facing their economies. Many African countries have implemented diverse strategies to attract and retain skilled professionals. Some African countries have improved economic opportunities and incentives to attract professionals from foreign countries. For example, Rwanda has positioned itself as a hub for business and innovation with the development of the Kigali Innovation City (KIC) which is dedicated to fostering the growth of digital entrepreneurs, businesses, students, and professionals who are relocating to the country.

Another strategy being employed is focusing on education and skills development. Ghana, through the Ghana Skills Development Initiative (GSDI) has partnered with the German Federal Ministry for Economic Cooperation and Development (BMZ) to improve Technical and Vocational Education and Training (TVET)—a system that equips individuals with practical and occupational skills—by establishing better standards and mentoring systems and by drawing on resources from other nations and organizations. Ghana's focus on education and training not only cultivates local talent but also creates an ecosystem that is attractive to both local and international skilled professionals. This dual effect strengthens the country's ability to retain talent while appealing to global employers and expatriates.

Kenya has supported the technology ecosystem in Nairobi's "Silicon Savannah" by using tools such as incubators, boot camps and government incentives for startups, thus creating opportunities for skilled workers.

Nigeria has been focused on engaging its diaspora community through initiatives like the Nigerian Diaspora Investment Summit (NDIS), which aims to promote investments and collaborations in healthcare, IT and education sectors. Initiatives like NDIS harness the potential of Nigeria's global community to enhance domestic opportunities and address barriers to attracting and retaining skilled professionals, positioning the country as a hub for innovation and talent.

With the aim to attract and retain highly skilled professionals, Mauritius streamlined its residency and work permits for high-skilled professionals by introducing the Expert Occupation Permit (EOP) and reduced salary thresholds for Occupation Permit applicants.

The strategies employed by African countries to attract and retain skilled labour demonstrate the importance of fostering ecosystems that combine economic opportunities, policy reforms, and infrastructure development. By learning from successful initiatives across the continent, nations can create environments that not only attract global talent but also nurture and retain local professionals, driving sustainable economic growth and innovation.

The readiness of African labour markets to absorb, retain, and utilize skilled professionals under the AfCFTA varies significantly. While some African countries have established training facilities and policies that support skills development, others face significant challenges in workforce preparedness. Many countries, particularly in Sub-Saharan Africa, struggle with gaps in education quality, limited vocational training, and a lack of alignment between educational programs and market demands. For instance, a shortage of digital and technical skills in many regions poses a barrier to integrating skilled professionals across borders, as employers may struggle to find workers with the specialized skills required for growth sectors like ICT and renewable energy.

African countries that have well- developed sectors like technology, finance, healthcare and education (such as Kenya, South Africa, Nigeria and Rwanda) are better positioned to absorb skilled labour. These countries have developed and are developing specialized hubs such as the Kigali Innovation City to attract skilled professionals to emerging industries. Collaboration between governments, businesses and international organizations (such as Ghana's partnerships in TVET) also strengthens institutional capacity to develop and retain skilled labour. Without such collaborations, the capacity for effective absorption and utilization of skilled labour diminishes.

Demographic factors also play a critical role in labour market readiness. Africa has the youngest population in the world, with nearly 60% of its population under the age of 25. This youth demographic represents both an opportunity and a challenge: while young workers can contribute to economic growth, they often lack the necessary skills and experience to meet the demands of skilled professions. Bridging this gap requires investment in targeted training programs and education reforms to build a workforce capable of supporting AfCFTA's objectives. Rwanda has made strides in developing its education sector to align the same with the needs of the labour market offering an example of how investment in education can prepare a country's workforce for integration under AfCFTA.

Overall, while Africa possesses a youthful and increasingly ambitious labour force, its readiness to support AfCFTA's skilled labour integration remains uneven—marked by promising progress in some regions and persistent structural gaps in others, underscoring the urgent need for coordinated investment in education, skills development, and enabling ecosystems.

While some African countries demonstrate a strong capacity to absorb and utilize skilled labour, some still face significant challenges due to economic, infrastructural and policy constraints. To fully unlock their potential and benefit from frameworks like AfCFTA, African nations must invest in infrastructure, align education with market demands, foster public-private partnerships and implement policies that attract and retain talent.

The Role of Expatriates in Skill Transfer and Workforce Development

Expatriates play a critical role in bridging knowledge and skills gaps within African labour markets. By bringing expertise from more developed or specialised industries, they can significantly contribute to local workforce development through direct training, mentorship, and collaborative projects. Key sectors such as technology, healthcare, and manufacturing have benefited from the transfer of advanced technical knowledge—often unavailable locally—delivered through structured programmes like on-the-job training, technical workshops, and leadership development initiatives.

For example, the Mastercard Foundation Scholars Program has enabled global professionals to mentor young Africans in leadership and entrepreneurship, helping to cultivate a generation of skilled and innovative workers. In healthcare, organisations such as Médecins Sans Frontières (Doctors Without Borders) have supported the transfer of specialised medical knowledge and techniques through expatriate-led training programmes in underserved regions. Similarly, the Pan-African University (PAU) incorporates international faculty to teach African students advanced skills in science, technology, and innovation. These expatriates not only deliver world-class education but also mentor students, contributing meaningfully to the growth of a highly skilled workforce.

We are also seeing these efforts manifest boldly in the *Wings to Fly programme*—run by Equity Group Foundation in partnership with the Mastercard Foundation and other global partners—has awarded over **60,000** secondary school scholarships to academically gifted but financially disadvantaged students across Kenya. With **82%** of scholars qualifying for university and over **900** admitted to top global institutions, the programme's emphasis on mentorship, leadership, and community service has produced a pipeline of globally exposed, locally rooted talent that is already transforming communities and workplaces.

Cultural differences often pose significant barriers, as expatriates may face difficulties in understanding local practices, work styles, or social norms, which can impact their ability to connect with local employees. For instance, hierarchical workplace structures in some African countries might clash with more collaborative approaches that expatriates are accustomed to, creating friction in training environments. Language barriers can further complicate communication and mentorship, especially in multilingual countries where expatriates may not speak local or widely used languages fluently. Additionally, resistance to change from local employees or organizations may arise, particularly if new practices are perceived as replacing traditional methods rather than enhancing them.

Addressing these barriers requires deliberate strategies, such as cultural orientation programs for expatriates, fostering inclusive workplace environments, and creating policies that encourage mutual respect and collaboration between expatriates and local workers. By overcoming these challenges, Africa can fully leverage expatriate expertise to drive workforce development and sustainable economic growth.

Implications of Work Permit Frameworks and National Policies on Labour Mobility

Work permit frameworks and national policies in Africa often pose significant challenges to labour mobility, despite the goals of regional integration under the African Continental Free Trade Area (AfCFTA). Restrictive permit requirements, lengthy application processes, and high fees discourage the free movement of skilled professionals across borders. For instance, in South Africa, the Critical Skills Work Visa is limited to professions on a prescribed list, which excludes some sectors that could benefit from foreign expertise. Similarly, Kenya imposes stringent conditions on issuing work permits, often requiring proof that no local worker can fill the position, creating delays and uncertainties for employers and expatriates.

Moreover, disparities in work permit regulations among African countries lead to inconsistencies. This lack of harmonization increases the transactional costs for businesses operating across multiple jurisdictions, reducing the appeal of cross-border employment within Africa. There are encouraging examples of progressive policies aimed at enhancing labour mobility. For instance, under the East African Community (EAC), member states have committed to the free movement of workers through the Common Market Protocol. Countries like Rwanda and Kenya have removed work permit fees for Easy African citizens working in the two countries. Rwanda's One-Stop Centre for Immigration enables faster processing of permits, reflecting its broader commitment to being a regional hub for business and skilled professionals.

The 2023 report by the Africa Visa Openness Index (AVOI) showed that 48 of 54 countries currently offer visa-free entry privileges to the citizens of at least one other country. Of the remaining six countries, four (Benin, Seychelles, The Gambia, and Rwanda) ranked in the top 20 in 2023 AVOI because they do not require visas to the citizens of all other African countries. 33 of 54 countries offer visa-free travel to at least 10 other countries.

In 2023, Rwanda liberalized further by extending visa-free access to the citizens of all African Union member states. This has eased the burden of travel for the citizens of 35 African countries who had hitherto been required to obtain a visa on arrival. It has also given effect to the country's commitment to the African Union's Protocol on the Free Movement of Persons, Right of Residence and Right of Establishment.

Conclusion and Recommendations

Maximizing the benefits of labour migration for migrant workers and their families as well as minimizing its risks and social costs requires fair and effective labour migration governance. Well-managed migration has the potential to yield significant benefits for both origin and destination countries. Mismanaged or unmanaged labour migration can have serious negative consequences for States' and migrants' well-being, including potential destabilizing effects on national and regional security.

To fully maximize the benefits that AfCFTA aims to bring with regards to labour mobility, there is need to first and foremost align national laws, policies and regulations and ensure that these laws extend the same rights and protections to all workers. Further, there is need to ratify and domesticate all the International Labour Organisation (ILO) Conventions on Labour Migration as is appropriate to each Member State and harmonise national laws and regulations with international labour standards.

African nations also need to build stronger institutional capacity to manage labour migration—through coherent national policies, harmonised legislation, and well-coordinated government structures. This means creating dedicated focal points within key ministries and strengthening inter-agency cooperation, while ensuring that migration policy is aligned with broader development and population goals.

But laws and policies alone are not enough. Labour mobility now sits at the intersection of economic resilience, regional integration, and human capital transformation. It demands legal systems that can work across borders, respond to shifting markets, and support the ambitions of a mobile, skilled, and youthful workforce.

At ALN, this is not theory—it's reality. When we assess the 14 markets where we have a physical presence, and the many more where we provide integrated legal services, a common thread emerges: countries are grappling with how to move from fragmented frameworks to future-ready systems. Whether it's supporting with the design of modern employment codes, or advising companies expanding across multiple jurisdictions, we see the urgent need for legal infrastructure that enables continental mobility.

Africa's demographic dividend cannot be unlocked without legal coherence, institutional foresight, and cross-border agility. These are not just development objectives—they are legal imperatives.

Leveraging Regional Trade Agreements for Climate Adaptation and Mitigation: A Case Study of Madagascar

Dr. Levious Chiukira

Tanatsiwa Dambuza

This paper seeks to answer several key questions: How can the AfCFTA incorporate environmental provisions to support climate mitigation efforts? What specific measures can Madagascar adopt to leverage the AfCFTA for climate adaptation? And how can international trade drive sustainable development while addressing the unique challenges faced by island nations like Madagascar?

At the heart of these questions lies a mounting paradox. Small Island Developing States (SIDS) like Madagascar are bearing the brunt of climate change—experiencing tropical cyclones, droughts, and floods with increasing frequency and intensity. These climatic shocks not only threaten human lives and biodiversity, but also erode fragile economic systems and public investments in health, education, and infrastructure.

International trade is a major driver of CO_2 emissions—especially through transportation, with maritime shipping alone projected to triple its emissions by 2049.

Yet, trade can also enable the diffusion of climate-resilient technologies and promote the uptake of sustainable practices—if designed with environmental foresight. This tension between growth, equity, and ecological responsibility remains one of the defining challenges of the 21st century.

The intersection between trade and environmental sustainability has become increasingly prominent in global policy debates. Trade policies, once treated as separate from climate discourse, are now seen as key instruments in shaping both mitigation and adaptation efforts.

International trade is a major driver of CO_2 emissions—especially through transportation, with maritime shipping alone projected to triple its emissions by 2049. Yet, trade can also enable the diffusion of climate-resilient technologies and promote the uptake of sustainable practices—if designed with environmental foresight. This tension between growth, equity, and ecological responsibility remains one of the defining challenges of the 21st century.

Historically, trade and environmental sustainability have been at the centre of global diplomacy since the 1987 "Our Common Future" report and the 1992 Rio Earth Summit, which laid the groundwork for integrating transnational climate concerns into trade frameworks. The inclusion of environmental provisions in trade agreements has since gained traction, particularly in high-income economies.

However, for developing countries—especially SIDS—there remains an urgent need to ensure that trade systems are not just open, but also resilient and responsive to environmental vulnerabilities. Reducing tariffs on climate-friendly technologies, for example, is essential for boosting accessibility, deployment, and compliance with global mitigation goals.

Madagascar's case offers a compelling entry point into this discussion. Despite contributing just 0.1% of global greenhouse gas emissions, Madagascar ranks among the world's most climate-vulnerable countries due to its low-lying coastlines and reliance on agriculture. With a population of approximately 28 million and a nominal GDP of around USD 16 billion (World Bank, 2023), Madagascar's economy is rich in potential yet constrained by systemic vulnerabilities. It is the world's largest producer of natural vanilla, and a key exporter of cloves, lychees, coffee, shrimp, and precious stones.

Its significant reserves of ilmenite, chromite, cobalt, and nickel underpin its growing role in the global minerals market (Yager, 2024; SADC, 2023). More recently, Madagascar ratified the AfCFTA in November 2024—signalling a strategic shift toward deeper regional integration, expanded market access, and the opportunity to harness trade as a lever for climate adaptation and technological innovation.

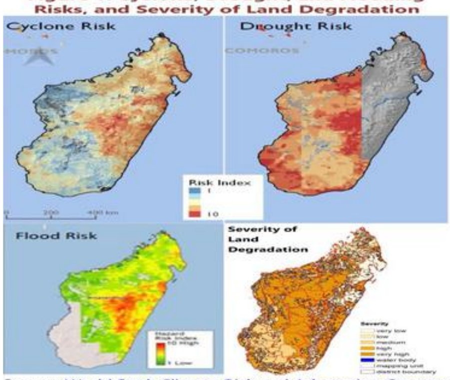
Against this backdrop, Madagascar's situation raises urgent questions about how trade agreements like the AfCFTA can be strategically leveraged to address environmental vulnerabilities. As this paper will argue, aligning national adaptation efforts—such as Madagascar's National Adaptation Plan and National Climate Change Adaptation Plan (2021)—with AfCFTA's trade facilitation mechanisms could provide a critical pathway for building resilience. In doing so, Madagascar may not only safeguard its economic future, but also offer a blueprint for how island states and vulnerable economies can turn trade from a threat into a tool for transformation.

Climate Change Environmental Challenges in Madagascar

Madagascar is among the world's most climate-vulnerable countries due to its exposure to extreme weather events, sea level rise, and ecological fragility (ODI, 2024; Wheeler, 2011). Climate change has intensified droughts, disrupted rainfall patterns, and increased the frequency of cyclones—such as Cyclone Batsirai, which in 2022 affected 28,000 people and damaged vital infrastructure (British Red Cross, 2023). Projections show rising temperatures of up to 2.5°C by 2100, with declining rainfall from the 2060s onwards (AfDB, 2018).

Although Madagascar contributes just 0.1% of global emissions, deforestation and land use change account for 81% of its historical emissions, exacerbating soil erosion and biodiversity loss (Clark, 2012; IMF, 2022). Agriculture—central to the economy—is especially at risk, with climate-related disruptions causing productivity losses of $95 per worker over the past two decades (IMF, 2022). These challenges heighten food insecurity, displace communities, and strain public resources, underscoring the urgent need for climate adaptation.

Figure 1. Cyclone, Drought, and Flooding Risks, and Severity of Land Degradation



Source: World Bank Climate Risk and Adaptation Country Profile, 2011, USAID, 2018.

Figure 1. expresses the risk Madascar is exposed to and why there is need for extensive programs to mitigate and adapt.

Madagascar's National Adaptation Plan (PNA), published in 2021, aims to address these challenges by strengthening adaptation governance, integrating adaptation measures into priority sectors, and mobilising finance (IMF, 2024). Despite Madagascar's minor contribution to global emissions, its high vulnerability to climate hazards, coupled with deep social and economic vulnerabilities, positions it as one of the least prepared countries to cope with climate change, ranking 178th out of 187 countries on the 2022 ND-GAIN Index (Notre Dame Global Adaptation Initiative, 2022). The ND-GAIN Country Index assesses a nation's vulnerability to climate change alongside its readiness to enhance resilience, essentially measuring how prepared a country is to face climate-related challenges.

Against this backdrop, Madagascar's situation raises urgent questions about how trade agreements like the AfCFTA can be strategically leveraged to address environmental vulnerabilities. As this paper will argue, aligning national adaptation efforts—such as Madagascar's National Adaptation Plan and National Climate Change Adaptation Plan (2021)—with AfCFTA's trade facilitation mechanisms could provide a critical pathway for building resilience. In doing so, Madagascar may not only safeguard its economic future, but also offer a blueprint for how island states and vulnerable economies can turn trade from a threat into a tool for transformation.

Rank	Country	Score
178	Madagascar	35.2
179	Sierra Leone	35.0
180	Mali	34.2
182	Guinea-Bissau	32.9
183	Sudan	32.7
184	Dem. Rep. of the Congo	32.5
185	Eritrea	30.6
186	Central African Rep.	27.9
187	Chad	27.2

The climate challenges faced by Madagascar, therefore, illustrate the critical need to integrate climate adaptation and mitigation into trade policies. As Madagascar navigates its vulnerability to climate impacts—ranging from extreme weather events to sea level rise—leveraging international trade agreements like the AfCFTA can provide essential support for sustainable development. Enhancing trade in climate-friendly goods and technologies, alongside reducing barriers and promoting economic diversification, are vital strategies for building resilience. Addressing these dual challenges of trade and climate change requires robust international cooperation and well-crafted policies that balance economic growth with environmental protection. Such an integrated approach will not only safeguard Madagascar's unique biodiversity and socioeconomic stability but also serve as a model for other vulnerable nations facing similar climate and trade challenges.

The Trade-Climate Nexus

Climate change poses systemic risks to trade, while trade itself can either exacerbate or help mitigate these risks. Rising temperatures, shifting weather patterns, and extreme events disrupt supply chains, alter comparative advantages, and threaten economic stability—particularly in vulnerable economies like Madagascar. To manage these disruptions, proactive trade policies must support climate adaptation by improving access to climate-resilient goods and services, enabling green investments, and fostering international cooperation.

Trade can contribute to environmental degradation through increased emissions from transportation, deforestation, and resource-intensive production. Emissions from goods transport alone are projected to triple by 2049 (UNCTAD, 2021; Durant, 2020). At the same time, trade is a powerful enabler of climate action. It facilitates the diffusion of climate-friendly technologies and can promote stronger environmental standards when embedded in trade agreements (WTO-UNEP, 2009).

The inclusion of environmental provisions in Regional Trade Agreements (RTAs) is growing. By 2016, 121 RTAs explicitly referenced environmental goals (Martínez-Zarzoso, 2018), and around 40% of recent trade agreements now include dedicated chapters on sustainability (WTO, 2022). These provisions—ranging from tariff reductions on green goods to cooperation on environmental governance—are critical tools for aligning trade with climate priorities.

The East African Community Customs Union Protocol, for instance, permits restrictions to protect the environment and natural resources, while promoting regional collaboration on sustainability (George, 2013). However, not all agreements have struck the right balance. NAFTA's Chapter 11 was widely criticised for enabling investor challenges to public interest regulations, prompting reforms under the USMCA (Yamaguchi, 2020; OECD, 2018).

This evolving landscape shows that trade, when carefully governed, can serve as a force for climate resilience. For countries like Madagascar, leveraging AfCFTA to integrate environmental safeguards and access adaptation-enabling technologies is not just strategic—it's necessary. As this paper argues, future trade negotiations must reflect the climate vulnerabilities of participating nations and align closely with national adaptation priorities. Only then can trade fulfil its potential as a pathway to sustainable, inclusive development.

The side of AfCFTA and climate change issues

The African Continental Free Trade Area (AfCFTA) includes important environmental commitments—particularly through its Investment Protocol, which calls on member states to support sustainable investments that reduce emissions and build climate resilience. This includes financing for renewable energy, low-carbon technologies, and climate adaptation projects like regional mitigation programmes and special economic zones with lower carbon footprints.

There's also a push to protect key natural resources such as water and biodiversity, and to strengthen collaboration on climate-related investment policies. These provisions show that African leaders increasingly see economic growth and climate action as mutually reinforcing, a view echoed during the Africa Climate Summit 2023, where the Nairobi Declaration called for joint action to integrate climate goals into the AfCFTA's rollout.

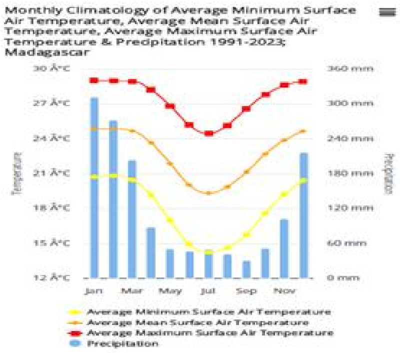
However, challenges remain. Despite these provisions, experts warn that without strong complementary climate policies, the AfCFTA could lead to higher emissions. As trade and industrial activity expand, studies suggest that CO_2 and other greenhouse gases like methane could rise by up to 0.6% by 2045 (UNECA, 2024; Bengoa et al., 2021). This risks undermining the very development gains the AfCFTA aims to deliver.

Critics also point out that the AfCFTA's core agreement barely mentions the environment, offering only vague references to states' regulatory autonomy. Without more explicit environmental safeguards, there's a limit to how transformative the AfCFTA can be on climate issues (van der Ven & Signé, 2021).

Yet, the agreement still holds major potential. By improving regional supply chains, the AfCFTA can reduce the carbon footprint of goods, cut dependency on long-distance imports, and shift trade toward more sustainable local production. It can also boost adaptation efforts by facilitating knowledge exchange, enabling access to green technologies, and expanding trade in climate-friendly goods and services.

Leveraging opportunities within AfCFTA for climate adaptation in Madagascar

As an island nation, Madagascar faces unique environmental challenges, including vulnerability to sea level rise, extreme weather events, and biodiversity loss. These challenges are exacerbated by the country's geographic isolation and reliance on natural resources. Despite the lack of explicit environmental provisions, the AfCFTA offers strategic opportunities for Madagascar to leverage trade for climate adaptation and mitigation.



Madagascar can use the AfCFTA to promote trade in environmental goods and services. Reducing tariffs on these goods would make it easier to access climate-resilient technologies and strengthen regional value chains—important for an island nation vulnerable to supply chain disruptions caused by extreme weather (Van der Ven & Signé, 2021).

To make this work, Madagascar should also support existing climate initiatives. A Strategic Environmental Assessment (SEA) would help ensure that AfCFTA rules align with national sustainability goals and protect ecosystems (Manduna & Fundira, 2022).

Finally, Madagascar needs to integrate climate policy into trade strategy. This includes regular coordination between trade and climate officials to ensure that trade supports climate goals—especially in agriculture, where climate shocks threaten food security (CUTS International, 2021).

Policy Recommendations

To maximise the potential of the AfCFTA for climate adaptation in Madagascar, several policy recommendations should be tailored to its unique challenges:

1. Reduce Tariffs on Environmental Goods: Removing tariffs on environmental goods is a straightforward measure to promote sustainable development. Casella and De Mello (2023) emphasise that this step can align trade policies with environmental goals. For Madagascar, this means facilitating access to renewable energy technologies and climate-resilient agricultural tools, which are essential for coping with rising sea levels and extreme weather events.

2. Enhance Regional Cooperation: Strengthening regional cooperation on climate adaptation and mitigation through joint initiatives and sharing best practices can build a cohesive approach to addressing environmental challenges. This is particularly important for Madagascar, as regional collaboration can provide support during climate-induced disasters and promote the sharing of adaptive technologies suitable for island environments.

3. Support Local Communities: Developing policies that support local communities in adapting to climate change is crucial. Providing training and resources for sustainable farming practices can enhance resilience and improve livelihoods. This is particularly important for Madagascar's rural communities, which are highly dependent on agriculture and vulnerable to climate variability.

4. Establish Monitoring Mechanisms: Creating robust monitoring and reporting systems to track the environmental impact of trade activities can ensure compliance with climate goals and provide data to inform policy adjustments. For Madagascar, this means monitoring the impact of trade on coastal ecosystems and biodiversity, which are critical for tourism and fisheries.

Conclusion

Despite the absence of explicit environmental provisions, the AfCFTA offers opportunities for Madagascar to leverage trade for sustainable development by promoting environmental goods and services, reinforcing existing climate initiatives, and integrating climate policies into trade agreements. Looking forward, the AfCFTA has the potential to evolve and include comprehensive environmental considerations, aligning with Africa's Agenda 2063 for sustainable growth and development. Policymakers and stakeholders are encouraged to prioritise the integration of climate change measures within the AfCFTA framework, ensuring that trade policies contribute positively to environmental sustainability and resilience against climate impacts.

OUR THINKERS

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Rosa is a Co-Managing Partner at ALN Kenya I Anjarwalla & Khanna, an Advocate of the High Court, a certified governance auditor, public secretary, and qualified CPA.

Repeatedly ranked by Chambers Global, Legal 500, and IFLR1000 as one of the region's top legal minds, she was also named among Business Daily's Top 40 Women Under 40-a testament to her influence and excellence in the field.

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Chris Diaz is the Executive Chairman of Adili Group and Director of Growth and New Markets at ALN Kenya and ALN Tanzania. With 33 years of experience in brand building and growth strategy, he is committed to fostering sustainable business practices and youth empowerment. A thought leader who has spoken at renowned institutions like Havard and Oxford, Chris brings valuable insights on integrating ESG principles and innovation into African trade, making him a key participant in the discussions during the webinar.

Dr. Levious Chiukira

With over 15 years in research and consultancy, Dr. Chiukira brings bold insight into the crossroads of politics, public policy, regional trade, and gender. A Political Studies PhD from the University of Johannesburg, he's authored influential peer-reviewed work shaping conversations from trade to gender equity. Dr. Chiukira doesn't just study change-he helps design it. From advising governments to decoding the political DNA of economic development, his work has felt a mark across Southern Africa.

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