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**Resolving the Farmer-Herder Crisis in Nigeria's Central Zone:
The Contribution of Trade and Gender Inclusion****Nater Paul Akpen**

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Abstract: In concert with population growth, crime, and inefficient police action, climate change has driven the farmer-herder crisis in the central zone of Nigeria. The crisis has resulted in deaths, destroyed property and caused food insecurity. This essay studies the farmers and herders, who are the key players in this crisis. It also examines the efforts made to prevent, remediate, or mitigate the effects of these conflicts. These efforts have varied from the African Union to the government to civil society organisations. They have mostly been ineffective due to poor implementation. Trade and gender inclusion are suggested as essential contributory elements in resolving the farmer-herder crisis. While used in other crises, it is underutilized in farmer-herder crisis resolution literature. It is the conclusion of this essay that trade and gender inclusion would strengthen any strategies for containing and preventing the farmer-herder crisis.

Keywords:

1. AfCFTA
2. Climate change
3. Farmer-herder crisis,
4. Fulani
5. Gender inclusion
6. Trade

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1. Introduction

Nigeria's central zone, also called the North Central or Middle Belt, is located roughly in the middle of Nigeria. It is the food production hub of the country. Presently, the region has gained international notoriety due to the farmer-herder crisis that has made the zone its major battleground.

Due to the crisis, six thousand persons have been killed and 62,000 displaced – more persons than have been either killed or displaced by Boko Haram (that terrorist group that had shocked the world in 2014 when they kidnap hundreds of girls from a boarding school in Chibok, Borno State) (Kwaja & Ademola-Adelehin, 2018, p. 7; The Economist, 2021). The consequences of the crisis are loss of life and displacement, food insecurity and loss of property and livelihoods (Kwaja & Ademola-Adelehin, 2018, p. 6).

Historically, governments and civil society organisations have sought ways to resolve these conflicts. The results have been varying, ranging from fairly effective to dismal. This essay

summarises these efforts together with history and conflict drivers while focusing on the contributions that trade, and gender inclusion can make to resolving the crisis because such modalities have not commonly featured as resolution techniques in the literature and because they have shown effectiveness in other crisis settings (UN Women, 2021).

2. Historical perspective

2.1. Who are the herders?

Nigeria has more than 250 ethnic groups, each speaking different languages and possessing different cultures, customs and practices. Even socioeconomic roles are often determined by the ethnic group (Thomas, 2024, p.6). Over 90 per cent of the herders are Fulani (Crisis Group, 2017, p. 1). The Fulani ethnic group are a large and important ethnic group in Nigeria's history, politics, and modern economy. Outside Nigeria, the Fulanis are found in 13 other West and Central African countries; they are the largest nomadic/semi-nomadic group in the world. (Crisis Group, 2017, p. 1). Aside from being herders, there are the "settled" and semi-nomadic groups of Fulani (Thomas, 2024, p. 6). They are well-connected with the herders, and their relationship is a symbiotic one. For example, the settled Fulani who are legislators or in the executive branch of government may advance policies that would protect the interests of the nomadic herders. In return, the herders may have among their flock animals owned by their "settled" counterparts.

The herder's contribution to Nigeria's modern economy is significant. They supply the greater portion of the country's meat, milk, hides, and dairy products (Majekodunmi, 2014, p. 1). The herders own 90 per cent – about 19.5 million cattle, 975,000 donkeys, 28,000 camels, 72.5 million goats and 41.3 million sheep – of the total animal herd in Nigeria (Federal Ministry of Agriculture and Rural Development, 2011, p. 27). Livestock makes up 20 to 30 per cent of agricultural production, and up to 8 per cent of overall Gross Domestic Product (GDP) (Ogbeh, 2011).

Their migratory routes have facilitated ties between other ethnic groups and have enabled the exchange of goods, trade that otherwise would have been non-existent. Importantly, these migratory routes traverse national boundaries, cutting across West and Central Africa. There have even been suggestions that for the herders, the Fulani ethnic group identity is stronger than national identities, with national borders existing as simply modern and artificial distractions to their fraternity. Thirty per cent of livestock slaughtered in Nigeria are brought in by herders from other countries (Food and Agriculture Organisation, 2013, p. 5). That is, Nigeria not only provides feed for foreign herds, but it also serves as a market for livestock. A crisis between farmers and herders threatens this market.

The Fulani have clear gender roles. While the male herders move about with the flock, the women produce and sell dairy products, farm crops and undertake other business activities that contribute to the local economies (Mercy Corps, 2022, p. 23). Male herders may often rear cattle for local farmers, in exchange for fees or patronage, further integrating them into the host region's socioeconomic life.

2.2. Who are the farmers?

Unlike the herders who come from largely the same ethnic group, the farmers come from a variety of ethnic groups such as Tiv, Jukun, and Chamba (Thomas, 2024, p. 6). These groups have long histories of being sedentary in particular areas. On the fringes of regional borders where

these ethnic groups intersect, there are usually communal clashes over the original owners of farmlands. For example, there have been Tiv-Jukun clashes in Taraba state over farmlands (Thomas, 2024, p. 6).

Nigeria is especially known for its oil and gas production. However, agriculture employs 70 per cent of the Nigerian labour force. Most of these farmers – 80 per cent – are smallholders (Thomas, 2024, p. 6) in the centre and south of the country, who supply most of the country's tuber and vegetable crops (cassava, yam, etc) while farmers in the north produce most of the grains (millet, rice, beans, maize, sorghum). Together, they account for 90 per cent of Nigeria's agricultural output (Thomas, 2024, p. 6).

Crop production is the largest segment within agriculture and accounts for more than 80 per cent of agricultural production and nearly 19 per cent of the country's GDP (Thomas, 2024, p. 6). Aside from crop and livestock agriculture, fisheries and forestry make up 3.2 and 1.1 per cent of the GDP (Thomas, 2024, p. 6).

2.3. Farmer and Herder Interactions

For years before, during, and after colonialism, herders in Nigeria moved their cattle from the semi-arid zone of the Sahara Desert (Nigeria's northern region) to the south of the country (see fig. 1). They were attracted by the pasture – Nigeria's middle belt and south consists of savannah and forests (Crisis Group, 2017, p. 3). They were also attracted by heightened security in these regions and the non-endemicity of parasitic cattle diseases such as trypanosomiasis or sleeping sickness (Crisis Group, 2017, p. 3). Further, the herders moved as a “tax-evasion” strategy. There was a cattle tax called the jangali, which was imposed by the British colonial administration in Nigeria (Crisis Group, 2017, p. 3).



Figure 1. Map of Nigeria's Agricultural Belts (Crisis Group, 2017, p. 22)

Through the first six months of the year, there was a tacit rule—unwritten but known and obeyed by all—that permitted herders the use of lands for grazing. The first half of the year is the "dry season" when there is little rainfall and agricultural activity is low. Indeed, this was welcome as the animals fertilized the farmlands in preparation for the farming season.

These interactions have historically been symbiotic and, at times, competitive but hardly violent. Symbiotic because they were an exchange of goods – the herder provided meat and the farmer provided crops; farmers used cattle dung for manure; farmers entrusted their livestock to the herders; and after harvest, the cattle helped to clear farmlands in preparation for the next farming season (Moritz, 2022, p. 139). When the dry season ended, the herders normally vacated these areas, returned to their bases further in the north of the country and only returned the following first half of the year (Crisis Group, 2017, p. 3). Competitive because the farmers needed the land for farming, while the herders needed the land to feed their cattle with vegetation. The symbiosis predominated the competition because there was a clear dividing line between the end of one activity and the start of the other.

Herders and community leaders of farming communities agreed on migratory routes – called the burti or butali. Whatever disputes that arose from the herd wandering away from those routes and damaging crops were resolved by the community leaders and herder leaders (ardos) (Crisis Group, 2017, p. 6). Defying these resolutions meant resorting to the local government authorities.

But the climate change has upset this balance – and with murderous consequences. The continuation of this migration southward insidiously resulted in conflicts between the farmers and the herders. In addition to climate change, other drivers for the escalation of these crises are population growth, crime, inefficient police action, incoherent national policies, and cultural changes.

3. Drivers

The farmer-herder conflict is a catch-all construction used to refer to "a range of interactions, typically describing resource competition between pastoralist herders and sedentary farmers" (Kendrick & Sanders, 2024). These interactions have historically been shown to be symbiotic and at times competitive but hardly violent. Climate change, population growth, crime, and weak policing are drivers of the crisis

3.1. Climate change

Between October and May, Nigeria's northern region experiences what is called the dry season where the physical environment is arid and semi-arid. From June to September, there is low rainfall ranging from 600 to 900mm (Crisis Group, 2017, p. 3). The Nigerian Meteorological Agency reported that in 30 years, the annual rainfall has dropped from 150 to 120 days; and in 60 years, more than 350,000 sq km of what was already arid land has turned into desert or desert-like conditions – and yearly, this desert/desert-like conditions have progressed southward at a speed of 0.6km per year (Federal Ministry of Environment, 2008, p. 12). As a consequence of these environmental changes normal agricultural and human livelihoods have been disrupted. Thus, many herders and others (4.2 million in all) have been forced to migrate southwards in search of productive land – and away from the desert that follows them in pursuit.

Migration is not a new phenomenon, as has been previously stated. But it was seasonal – when the north was at its most arid and rainless – between December and May, usually stopped

at the central zone of the country before a return was made back to the north. In the past 20 years, in response to their changing indigenous climatic conditions, pastures have shrunk or disappeared in the north and herders are staying for longer periods in the central zone – from December to July versus December to May (Crisis Group, 2017, 3). Increasingly, some herders are choosing to graze their herds permanently in the central zone as there is no pasture to return to in the north – in or out of season. Naturally, this has triggered disputes with the farmers as their farming seasons now clash with the migration and settlement of herders – especially as the number of sedentary farmers is on the increase.

3.2. Population growth

The most common immediate driver of farmer-herder conflict is damage to crops caused by migrating or resident livestock (Brottem, 2021, p. 2). The expansion of the population of the central zone – as indeed the rest of Nigeria - has caused the use of more land for agricultural cultivation. First, the farmers have increased in number. Similarly, the herders and herds may have increased in number to meet the growing meat, milk and hide needs of a growing population. This means that the contact between crop and herd – the most immediate cause of conflict – is more likely and thus the occasions where conflicts are a likely sequela.

A rural population in West and Central Africa, for example, was said to have grown by more than 40 per cent in the past 20 years; and over the past 40 years, cropland has doubled in size and covers at least 25 per cent of the total land surface (Brottem, 2021, p. 2).

Population growth also means an increase in non-agricultural uses of land, such as for the development of settlements, industrial complexes, and other public buildings. Either grazing lands or farmlands would be converted into these uses. In this case, alternatives must be sought for farming and grazing.

Farming communities are growing and with them the need to cultivate larger land portions for extended periods. Therefore, they now farm almost all year round – deploying dry-season farming techniques such as irrigation. Consequently, the farmers are now farming all year round and herders are grazing all year round (Bloem, Damon, Francis, & Mitchell, 2023, p.1 - 2). Since 1993, National Fadama Development Programme (a World Bank-funded project) has used public water sources such as rivers and streams for irrigation (World Bank, 2015). That herders utilise same sources for their herd has meant that these water sources constitute potential flashpoints for persistent conflicts.

What follows this arrangement is a cycle of attacks, reprisals, kidnappings, and destruction of crops and property. Armed militias have been formed and linked with either the herding groups or the farming groups (Bloem, Damon, Francis, & Mitchell, 2023, p. 6). These groups clash occasionally and with serious consequences, especially as the forming of these groups correlates with a proliferation of small arms. Equally worrying, pastoral land paucity is said to have pushed herders into sanctuary areas such as national parks and classified forests (Brottem, 2021, p. 2).

3.3. Crime

Crime in Nigeria relating to the farmer-herder crisis has varying dimensions, including rural banditry and cattle rustling, conflicts across Northern Nigeria, and terrorism.

A bandit is "a member of an armed group of thieves who attack travellers" (Hornby, 2015, p. 104). Were this to be the bandits that operated in Nigeria, the security question would have been less serious. These bandits have proliferated, engage in armed robberies, raid villages and

towns, and kidnap for ransom (Kuna & Ibrahim, 2015, p. 2). A combination of these has been identified as a contributory factor to the migrations of the herders' southwards (Crisis Group, 2017, p. 6).

Cattle rustling has increased roughly in the same period that has seen an increase in the farmer-herder crisis. The activity has grown in scale in the northern states where these rustling groups have operated with increasing boldness. Cattle rustling has also been reported as a major funding source for Boko Haram (Crisis Group, 2017, p. 5). Boko Haram is the terrorist group that had in 2014 kidnapped over 200 schoolgirls from their school in an act that shook Nigeria and reverberated right through the world. That same group has been responsible for the execution of thousands of Nigerians in the decade that has followed that mass kidnap. The herders reported that they had lost over one million cattle to the Boko Haram insurgency (Crisis Group, 2017, p. 6).

The northwest has become a sort of terror capital in the region. The roll call of terror organisations active in this region would include the Islamic State of the Greater Sahara, Jama'at Nusrat al Islam wal Muslimin, Al Qaida in the Islamic Maghreb, and the Islamic State in the West Africa Province (ISWAP). The concentration of these terror groups in the region is one thing, their ability to function almost unimpeded is quite another. In this, it is aided by a series of factors which include the following: the porosity of the Nigeria-Niger border which is about 1500km and invested with forest reserves and dense vegetation; arms and weapons trafficking; weak governance and poverty (five of Nigeria's 10 poorest states are found in this region). Also, the engagement of the military in at least 30 states of the federation means that they are stretched; this emboldens terror groups, and they can operate with little resistance (Ojewale, 2021).

Consequently, it was reported that in 2013, more than 64,750 cattle were stolen and at least 2,991 herders were killed across the northern region (Crisis Group, 2017, p. 5). Vigilante groups have been formed to combat bandits. But these have worsened insecurity by arrest and extrajudicial execution of rustlers – which has sometimes resulted in massive retaliation. In other cases, these vigilantes prey on the herders by demanding cash from herders as a "protection levy" (Crisis Group, 2017, p. 5).

The above taken together have driven the herders away from the north of the country. Also, such exposure to attacks may have caused the herders to procure small arms for self-defence (Crisis Group, 2017, p. 11). It is these same arms that are used in the farmer-herder crisis that takes place in the central zone of the country.

3.4. Inefficient police action

Farmer-herder crisis are a distortion of security. That it progresses begs the question of the role of the security forces, namely, the police force in restoring peace and order in troubled places. Nigeria operates a national police force (Azom & Uba-Uzoagwu, 2023, p. 296). That is, its command is centrally structured such that operative and administrative control comes from the lone Inspector General. This leaves the governors of states powerless in the face of conflicts that take place within their jurisdictions as the police force stationed in their state does not take commands from them. The governors are considered the "chief security officers" of their states but they lack operational control as far as the police force is concerned. When police respond to clashes between herders and farmers, it is usually after reports have been passed from state to federal levels and orders returned. The consequence is that the response is "slow poor, and above all without proper coordination" (Azom & Uba-Uzoagwu, 2023, p. 301). This has eroded trust in the police force as it is regarded as unable to handle clashes, as nonchalant or even as

complicit in the crisis. The response of the state government to this situation has been the formation of vigilante groups. This has led to a proliferation of small arms. And when such groups clash with the herders who had similarly armed themselves in response to banditry and cattle rustling, there is an endless cycle of violence and retaliation with loss of human life.

4. Consequences

The farmer herder crisis causes human casualties, food insecurity, livelihood and economic losses.

4.1. Loss of life

The human casualties that have arisen from the crisis are astounding. Estimates put the toll at 2,500 killed in 2016 – this was more than were killed by the Boko Haram insurgency in the same year. In Benue State alone, 1,878 people were killed between 2014 and 2016 (*Crisis Group, 2017, p. 7*; see fig. 2 for the geographical spread of farmer-herder casualties and fig. 3 for Boko Haram-related casualties). The total death toll from the farmer-herder crisis is put at 6,000 and more than 62,000 people have been displaced (Kwaja & Ademola-Adelehin, 2018. p. 6).



Figure 2. Map of Nigerian states with high incidence of herder-farmer casualties (Crisis Group, 2017, p. 24)



Figure 3. Map of Conflict and Insecurity in Northern Nigeria (Crisis Group, 2017, p. 23)

4.2. Food Insecurity

A consequence of the farmer-herder crisis has been food insecurity. The relationship is a direct and dynamic causal one (D'Souza & Jolliffe, 2013, p. 17). Globally, it is estimated that 650.3 million people who are categorized as "chronically undernourished" come from countries that are in conflicts aggravated by "climate-related shocks" (FAO, IFAD, UNICEF, WFP, & WHO, 2021, p. 51). Further, 75 per cent of children aged under five with stunted growth live in conflict countries (FAO, et al., 2021, p. 3).

Conflicts push farmers away from their farmlands – and this would mean a year of hunger as most of these farmers eat that which they produce. A Benue farmer reported losing 80% of crops, highlighting economic devastation (Bloem et al., 2023). Not only this, but they may also leave their households due to the conflict and find themselves in internally displaced persons camps – these have rapidly increased in the past year in keeping with the exacerbation of the farmer herder conflicts. In the camps, survival is the goal, and farming is a luxury that these camps do not usually cater for. Feeding is at the mercy of international aid organizations.

4.3. Livelihood And Economic Loss

The conflicts also limit the activities of both herders and farmers: this threatens their livelihoods (Dary, James, & Mohammed, 2017, p. 141), causes a decline in agricultural productivity, diminishes cattle holding and cultivated land area (George, Adelaja, & Awokuse, 2021). There are thus clear economic losses for the farmers and herders, and this is reflected even in GDP figures. The contribution of agriculture to Nigeria's GDP fell by 30 percentage points from 133.64

billion USD in 2013 to 78.45 billion USD in 2017 – this is in great part due to the farmer herder conflicts and the greatest dip coincides with times when the conflicts peaked (Okibe, 2022, p. 5; Sulaiman & Ja'afar-Furo, 2010, p. 147).

In two Southern states, Edo and Delta States, it was estimated that crops worth 40 million USD were lost annually to cattle invasion (Okibe, 2022, p. 3). The herders may report similar losses. Tellingly, these clashes take place mostly in the agriculturally most productive region of the country – the middle belt – the north central of the country. To the North is taken over by an ingression of the Sahel desert and droughts. To the South is a thick mangrove forest that is not amenable to large-scale farming – where the environment has not been rendered unproductive because of the oil explorative activities going on and the attendant environmental degradation.

5. Summary of efforts at containing crisis

5.1. The African Union

As a response to economic, political, and security changes arising from climate change and its knock-on effects, the African Union launched the Great Green Wall Initiative in 2007 (Kwaja & Ademola-Adelehin, 2018, p. 8). It aimed to set up 8,000km of trees along the southern Sahel in addition to rural development and ecosystem management initiatives. In 2013, the Nigerian government established an Agency saddled with the responsibility (Kwaja & Ademola-Adelehin, 2018, p. 8).

As climate change is a driver of the farmer-herder crisis, this represents among the most far-sighted responses. The Initiative established orchards, nurseries, solar and wind-powered boreholes. However, the tempo of activities has slowed down – almost to a halt – due to the failure of the Nigerian Federal Government fund the Initiative (Kwaja & Ademola-Adelehin, 2018, p. 8).

5.2. Government

The government at federal and state levels have taken turns creating Grazing reserves (1965), establishing the National Commission for Nomadic Education (1989), deploying security, establishing national grazing reserves (2016), state-level laws prohibiting open grazing, the Comprehensive Livestock Development Plan (2015), and National Livestock Transformation Plan (2019 – 2028) (Kwaja & Ademola-Adelehin, 2018, p. 7; Nigerian Economic Summit Group, n.d.).

Most of these have been ineffective. For example, a presidential committee issued a report that recommended the “the recovery and improvement of all grazing routes encroached by farmers” (Crisis Group, 2017, p. 10). The committee also suggested a release of \$317 million to state governments for ranch construction. On paper, this solution was satisfactory to both parties as farms were protected (via ranching) and grazing lands were also protected (via grazing routes reclamation). There was a change of government through elections. The funds were released to state governors. Nothing has been heard of the funds or from the parliamentary committee that was setup to investigate it. Established grazing reserves under state government arrangements have failed as a result of poor infrastructure and consumable such as pasture and water (Kwaja & Ademola-Adelehin, 2018, p. 7).

Another government measure that had questionable sustainability potentials at its roots and may have been undone by corruption was the following. The Federal Minister of Agriculture had

placed an order of “massive hectares of grasses” from Brazil. Such grass was never seen (Crisis Group, 2017, p. 7).

Others have directly resulted in conflicts – such as the anti-open grazing laws by state governments (Kwaja & Ademola-Adelehin, 2018, p. 8). These conflicts have arisen as the herders feel targeted by these laws. Indeed, local vigilantes have occasionally expelled herders from areas (Crisis Group, 2017, p. 12 -13). In other states, the herders have threatened legal challenge to the laws.

5.3. Civil society organisations

Studies by one non-governmental organisation recommended a strengthening of the conflict resolution capacities and supporting them to implement action plans that would transform conflict relationships and minimize conflict intensity (Mercy Corps, 2024, p. 29). Another recommends a differentiation between local disputes and armed extremist activity in high-risk areas, investing capital in the improvement of land management infrastructure, and prioritizing trust between communities and security forces (Brottem, 2021, p. 7 - 8).

Also, they have been the deployment of information, communication and technology, and programmatic interventions by these organisations (Kwaja & Ademola-Adelehin, 2018, p. 9 -10). For example, in response to cattle rustling, the Zycom Surveillance (Nigeria) and Datamars (Switzerland) developed a Radio Frequency Identification Device system which has can track and monitor cattle movements including when they are captured by rustlers (Kwaja & Ademola-Adelehin, 2018, p. 9). Centre for Information Technology and Development (CITAD) developed a system for providing minute-by-minute information and alerts on cattle rustling (Kwaja & Ademola-Adelehin, 2018, p. 9). While these are innovative, the question remains: once in the keep of the heavily armed rustlers would the police force engage the rustlers to retrieve cattle? If no, would the herders arm themselves to fight the rustlers and retrieve their cattle? Indeed, where cattle monitoring systems show cattle grazing on farmlands, exactly how would this knowledge prevent clashes? Would it perhaps provide farmers with an “objective” basis for fighting? Research is needed on these questions

6. Trade

In Nigeria, passing livestock may damage crops and it is a trigger for farmer-herder conflicts. These conflicts take more lives than prolific terror organizations working within the same territory. At the root of these conflicts lies a changing climate. Knock-on effects such as food insecurity and loss of livelihoods arise from these climate-induced conflicts.

In this section, it is argued that trade and trade policy can prevent farmer-herder conflicts, cause a reversal of the knock-on effects and foster resilience. One such trade policy, the African Continental Free Trade Agreement (AfCFTA), operationalizes this argument.

6.1. The response of trade to farmer-herder conflicts: the African Continental Free Trade Agreement (AfCFTA)

AfCFTA came into force with an ambition to "facilitate trade in food products and support the development of international production chains and greater value addition in Africa" (PwC, 2022, p. 4). The World Bank reports that full operationalisation of AfCFTA would see more than 50 million Africans lifted out of extreme poverty by 2035 (PwC, 2022, p. 4).

Nonetheless, whatever benefits arose from the agreement, climate change threatens to undo them. Especially as Africa is already very prone to adverse climate events – this is while still being the continent with the lowest emissions per capita. The emissions are atmospheric with warming effects bearing little relationship to the emission's place of origin.

AfCFTA can help minimise the risk of conflict by fostering the development of international production chains and value addition – both forms of the "deterrence mechanism". In boosting food security, medium and small enterprises can optimise the opportunities that AfCFTA offers by onboarding them into supply chains that were previously dominated by groups that mixed up armed conflict objectives with agricultural or business ones.

By addressing the knock-on effects of climate change, AfCFTA can address climate change - especially as it has been said to be compatible with Africa's climate objectives (PwC, 2022, p. 6).

6.1.1. Prevention

Trade policies can encourage conflict-reducing actions. It can also serve as punishment (CfR, 2023). Sometimes with great effect. There are international instruments that regulate sustainable fishing practices, for example. Fish that is not sustainably caught, in line with agreed-upon practices, would simply not be bought (PwC, 2022, p. 11). This could apply to the products that are on offer by the farmers and herders. If so, cattle raised on farms of displaced farmers or raised on national reserves or forests would not be bought; crops raised by in one way or another by farmers who have done combat with herders would not be bought.

Farm produces are more closely tied to a fixed geographical location than many other products. As farmer violence is in response to cattle encroachment, farmers engage in violence within small geographical radii. Thus, produce from farms of violent farmers can be recognised through measures such as certification issue. For the herders, the earlier section showed how tracking systems have been used in monitoring the movement of cattle – with an aim to curtailing rustling. These same systems can be used to delineate which herd of cattle is owned by a violent herder. That is, violence that took place at a given location and time can be traced to cattle herds that were at that location and time. Again, it is unlikely that herders would abandon cattle many kilometres away to fight.

These sanctions would pressure bad actors – whether farmers or herders – into proper behaviour. Battles are fought because, at the end of them, there would be consumers to sell to. Where these consumers are prevented by regulation, the aim of the battle would have been defeated for the combatants. This is the so-called deterrence mechanism (Assem, 2023, p. 2). Where the loss of livelihood is taken to fuel the farmer-herder crisis, an invigoration of trade would engage the combatants, give them a livelihood, and thus prevent future cycles of conflicts.

6.1.2. Reversal of effects

Extreme climate events, and their consequences such as farmer-herder conflicts, affect poor and marginalized populations to a greater extent than it does other populations (Barbier, 2020, p. 8). For example, it is poor farmers and poor herders who suffer food insecurity and loss of livelihoods the most during episodes of conflict. In addition, they all reside with the rural areas that suffer neglect in terms of absence of policing and social amenities, which heighten their vulnerabilities.

Trade at local, global, or regional levels can foster resilience by impacting incomes, food availability and prices (Department for International Development, 2013, p.15). Trade can act

to support Nigerians, in the short run, by making available a flow of supplies to regions that have seen violence the most and have experienced a shock/sudden reduction in food production and thus suffer food shortages the most.

More permanently, trade can facilitate changes in the agricultural sector by facilitating transformation to modern, sustainable and all-year-round farming and livestock techniques. Nigeria should not have to choose between meat or crop; it should be able to have both and all year round too. Population expansion and ongoing urbanization would demand this. And the investments that trade policies would attract would help institute these changes. Therefore, trade would "cushion" the effects of the farmer-herder crisis in the short run and "enable" an agricultural paradigm that would eliminate the farmer-herder crisis in the long run.

Further, international trade can create or restore livelihoods and raise incomes. This facilitates resilience and cyclically helps them escape food insecurity by granting them greater purchasing power. In 2015 – 16, El Nino induced a drought that left at least 41 million people food insecure in Southern Africa (International Institute for Sustainable Development, 2021, p. 8); within the same period, countries within the region experienced some of their hottest recorded years within a century with nearly 10% drop in agricultural production. This is a region where much of agriculture is fed by rainfall.

Staples such as maize were scarce and the currency depreciation due to the adverse event made purchasing even more difficult. Trade policy cushioned the effects in the short run in the following way: maize importation restrictions were lifted; maize became available, and prices dropped. By switching from net food exporter to net food importer, resilience was fostered, and a knock-on effect of climate change was kept at bay (World Trade Organisation, 2022, p. 101).

6.1.3. Resilience fostering

Displaced from farms and farming, there is a notable trend in farmers taking up work in the informal sector. Before the displacements, this was already an important sector in Nigeria with the International Monetary Fund estimating that 60 per cent of Nigeria's GDP was due to the sector (Bloem, Damon, Francis, & Mitchell, 2023, p. 7). The entry of displaced farmers into the sector particularly peaked at a time when the clashes between them and the herders peaked. Entry into the informal sector in this way has been discussed as a "safety net" in response to shocks – of both conflict and climate change (Bloem, Damon, Francis, & Mitchell, 2023, p. 8). This has been studied extensively and appears to suggest how trade can begin to reverse the secondary consequences of climate change (such as food and economic insecurity) while creating resilience in the face of the primary consequences (such as farmer-herder conflicts) (Bloem, Damon, Francis, & Mitchell, 2023, p. 8).

7. Gender inclusion

To base peace on inequality is to merely postpone violence and conflict. Unfortunately, this has been the preferred pattern of peace processes: the involvement of men and the exclusion of women. To pursue peace in this fashion, involving men and excluding women, belies a flawed approach. Where a peace process seeks to merely end violence, "women who are rarely the belligerents – are unlikely to be considered legitimate participants" (O'Reilly, Suilleabhain, & Paffenholz, 2015, p. 5).

"If the goal" however "is to build peace, it makes sense to gain more diverse inputs from the rest of the society" (O'Reilly, et al., 2015, p. 1). It is instructive to note that the "rest of society" consists of half of the world's population. Therefore, society need not be surprised when peace,

pursued in this fashion, is unsustainable. Indeed, peace that is not sustainable is not peace at all.

The position taken in this essay is that women are essential in the sustenance of peace and the prevention of violence. This position is arrived at through an examination of the game-changing role of women in peace processes, obstacles to their participation in such processes, and classroom lessons that history teaches.

From the outset, it must be stated that "women are much more than victims of war and conflict" (United Nations, 2018). Recognition of this would mean that the presence of women in peace processes would not be out of tokenism, or a consolation prize for one who has suffered, but out of relevance. Beyond participation at the negotiating table, women's inclusion could include the following: inclusive commissions, participation in problem-solving workshops, public decision-making, observer status at discussions, and mass action (Paffenholz, Ross, Dixon, Shluchter, & True, 2015, p. 6 - 8). Taken together, these pathways for inclusion would work for several reasons.

Where women are involved in peace processes, there is a much higher chance of an agreement being reached. In a research study undertaken by the Graduate Institute in Geneva, an in-depth analysis of dozens of peace processes revealed that women's participation tended to increase the outcomes of a peace process as compared to when they exercised weak or no influence on these peace processes (O'Reilly, et al., 2015, p. 1). Indeed, where women participated actively, the tendency for an agreement to arise was almost 100 per cent. Further, the participation of women in these processes meant that the likelihood of such agreements being implemented was greater (Smyth, Hersi, Baldoumus, & Tonelli, 2020, p.32).

The involvement of women in peace processes tends to push for the "commencement, resumption, or finalization" of negotiations (UN Women, 2015) – especially when negotiations have reached a deadlock or where they have lost momentum or faltered altogether. People tend to get used to prevailing situations whether good or bad. Wars, conflict, and violence are habits that stick too. Combatants who have spent several years in the trenches fighting would see the commencement, continuation, or finalization of peace processes as a new occurrence that would uproot the lives that they have gotten used to. Women, whose discrimination usually extends even to the battlefields, have no such inhibitions. For them, the life that they remember is the one that was before the institution of hostilities; the life where they were committed to their advancement (whether in education or business), family advancement, and also societal advancement. For them, peace represents a return to all these. Thus, the peace processes for them carry a more urgent quality. Therefore, they push for more concrete and fundamental issues instead of peripheral ones that tend to sidetrack negotiations (Paffenholz, et al., 2015, p. 10).

Further, women act as catalysts for peace because of the length, depth, and width of their local influence and networks. They know the situation on the ground; they know what issue would soon degenerate into a full-blown crisis, and what issue should not hinder the arrival of peaceful resolutions. In these, a case in point was given by Hilary Clinton, then US Secretary of State. In a negotiation that had deadlocked over the control of a certain river in Sudan, it was the womenfolk who intervened by stating that the river in question had dried up many years ago, was of no relevance to anyone, and so should not hinder a peace process. These women arrived at this knowledge which eluded their male folk because daily they had been the ones who went or knew others who went to the said river to obtain water for domestic needs (Clinton, 2011).

A peace agreement is likely to be sustained for about 15 more years if women take an active part in the negotiations (Smyth, et al., 2020, p. 8). In light of this, it is surprising that between

1996 and 2019, only 13% of women were negotiators and 6% of signatories of peace deals were women (The Economist, 2021). In Plateau State, Nigeria, women's involvement in conflict mediation and peacebuilding efforts was shown to reduce violence relapse (UN Women, 2021).

Challenges: obstacles to the participation of women

While piles of research and learned experiences have shown the benefit of women in the attainment of peace and security, it is strange to note that this option is not considered often enough. This situation is attributable to tradition, gender stereotypes, legislation, and state structures (Calman, 2011, p. 6).

Tradition hinders women's participation through a widespread acceptance of domestic violence against women and even honour killings – where women are killed by their male family members who disagree with their behaviour (usually sexual). Women are also hindered from participation through directed slander and defamatory campaigns aimed at embarrassing women out of public spaces. Where rape and sexual violence are used against women, women would tend to keep away from public roles to hide what their cultures have insidiously called 'shame'. Also, a tradition that restricts women from accessing information would automatically prevent their participation in any peace process simply because they are ignorant of the existence of that process. For example, the town hall meetings where such processes are initiated would normally be an all-male affair.

Where increased fundamentalist and sectarian groups target women, women would immediately get the message that their visibility is an invitation to attacks. This is seen in Nigeria where hundreds of women have been kidnapped by Boko Haram in the Northeast of the country, the best-known of which was the Chibok girls (The Economist, 2021). Traditions that hinder women-visibility and movement, such as the Purdah system, would prevent the vital participation of women in peace processes.

Gender stereotypes also contribute to the dismal participation of women in peace processes (Calman, 2011, p. 6). The stereotype that the role of women does not extend beyond domestic responsibilities means that the possibility of women participating in the very public role of peace-making is automatically limited. Another stereotype, especially perpetuated by the media is that focusing on the flaws – real or perceived – of the private lives of women instead of their very evident professional achievements. Related to this, unreasonably high demands are made on female public officials, far exceeding the scrutiny to which males are subjected.

Another stereotype is a patronising one whereby politics is taken to be a dirty game (due to use of dishonesty, negative campaigning, corruption, compromise, etc.), one in which women should not take part. Women, this view holds, are to restrict themselves to gossip and small talk. Repeated enough times, women themselves come to believe this and summarily keep away from peace processes. Also, war and conflict are seen as serious issues that can benefit only from discussions among men. Apart from being inaccurate, these stereotypes tend to prolong conflicts by stripping away the contribution of women - which research has proven to be very effective.

The third obstacle to participation is a restrictive legal and state structure. This is evident in situations where channels for gender equality are underfunded and lack any true correlation with the reality of women. Also, international and national state policies on domestic violence are routinely adopted. They fail, however, to bring about any real good because the political will is at best lethargic.

Legislation (especially customary law) also hinders the participation of women in public life as it prevents them from inheriting property, owning or having access to financial resources (Calman, 2011, p. 9). Even at the level of civil society, state structures blunt impact by stating

that support and grants would only be given to them if they develop a certain anti-women stance. For example, they would be routinely asked not to have women as workers or not to be vocal against domestic violence or honour killings. These conditions may even put the independence of civil society in question (Calman, 2011, p. 11).

Government and civil society organisations must take leadership in avoiding these stereotypes by including women in peace process. This is an evidence-based not only in the global West but also in Nigeria. These pieces of evidence must be widely disseminated in advocacy drives to win over men who may act as gatekeepers. Information sharing and exchanges among women at different must be facilitated through creation of fora for discussions between women at local levels and those with decision-making positions.

8. Conclusion

Through a direct and primary connection, climate change causes farmer-herder conflicts as has been demonstrated. Secondly, climate change (through the conflicts) causes human wastage, food insecurity and economic collapse, among other things.

Trade is instrumental to reversing these primary and secondary consequences of climate change. Similarly, research is clear on the role that women play in peace. The reasons for their marginalization have been identified as tradition, stereotypes, and legislative and state structures. Whatever benefits these reasons (which are not real reasons at all) may bring to vested interests do not justify these impediments to peace. Indeed, “nations that fail women, fail” (The Economist, 2021).

All actions – both present and future – regarding the containment and prevention of the farmer-herder crisis must have trade and gender inclusion components if they are to sustainably succeed.

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The African Paradox: A Land of Wealth, a People in Need

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Abstract: Africa's vast natural wealth stands in stark contrast to its enduring poverty and economic stagnation – a contradiction rooted in colonial legacies that established extractive institutions and external dependencies. Today, the continent remains heavily reliant on raw material exports, with intra-African trade accounting for just 13.8% of total trade. This over-dependence has stifled diversification and reinforced structural vulnerabilities. This essay examines the historical and systemic factors that have shaped Africa's economic trajectory, arguing that sustainable transformation requires industrialization, financial inclusion, and regional integration. It introduces three innovative economic models: skill-backed lending to expand financial access through competencies rather than collateral; apprenticeship-for-ownership programs to promote equity and transfer of productive assets; and the One-Continent, One-Supply Chain policy to build an integrated African production network. By investing in bold policy reforms, strategic regional cooperation, and community-driven enterprises, Africa can start a path toward economic autonomy and inclusive, long-term growth.

Keywords:

1. Africa's economy
2. Industrialization
3. Financial inclusion
4. Intra-African trade
5. Economic independence

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1. Introduction

Africa is a paradox: a continent overflowing with natural wealth – diamonds, gold, oil, fertile land, and rare minerals—yet persistently constrained by poverty, unemployment, and economic underdevelopment. Its resources fuel global industries, from smartphones to electric vehicles, while local populations struggle to access electricity, food security, and stable income. Why does Africa's immense wealth contribute more to global prosperity than to its own? The answer lies in a deep historical and structural context of exploitation, economic dependency, and missed opportunities for value addition.

For centuries, Africa has served as a raw material supplier to the world. Under colonialism and beyond, its primary role has been extraction – resources leave the continent unprocessed

and return as expensive manufactured goods. The Democratic Republic of Congo (DRC), for example, produces over 70% of the world's cobalt, a mineral vital to modern technology, yet almost none of it is refined locally (USGS, 2024, p. 66, 67). This pattern results in African economies remaining at the mercy of fluctuating commodity prices and global demand, while capturing only a fraction of potential value addition.

As Adam Smith noted, “No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable” (Smith 1776, Book I, Ch. VIII). Africa's lack of industrial capacity locks it into this unenviable position. In contrast, countries that have industrialized—Europe during the 19th century (Berlanstein, 2003) and East and Southeast Asia during the late 20th century (Athukorala, 2010) – transformed their economies through domestic manufacturing, infrastructure, and technical training. These countries moved from exporting raw goods to producing high-value products, retaining wealth and creating jobs. Africa has yet to make this transition at scale.

Today, industrialization and regional integration are not just economic preferences but developmental imperatives. The African Continental Free Trade Area (AfCFTA), launched in 2022, promises to reduce trade barriers and stimulate intra-African trade, creating the scale needed for homegrown industries to thrive. If successfully implemented, AfCFTA could lift tens of millions out of poverty and reduce reliance on exports to volatile foreign markets (World Bank, 2020). But trade deals alone are not enough.

Foreign aid, long considered a development solution, has proven to be a double-edged sword. While it has funded health and education, it has also fostered dependency and propped up unaccountable governments. According to Goldsmith (2001, pp. 123-148), foreign aid often empowers governments but fails to produce meaningful economic improvements. Sustainable change requires an internal economic foundation, not external lifelines.

That foundation must begin with people—Africa's youth, workforce, and entrepreneurs. Skill development and innovative financing are critical. Traditional loan models often exclude those without collateral or formal employment. Skill-backed financing, by contrast, invests in people based on their technical competence, not wealth. This shifts capital toward productivity and industrial growth. At the same time, mobile finance platforms like M-Pesa and Tala have broken down access barriers, enabling millions to receive, save, and borrow money in ways that bypass traditional banking systems.¹ These innovations prove that Africa does not lack ideas—it lacks policies that scale and sustain them.

To complement financial inclusion, educational and vocational training must be aligned with economic realities. Rwanda offers a compelling model. Its Industrialization and Local Value Addition programs integrate technical education with industrial planning. Apprenticeship and ownership pathways help young people move beyond survival work into skilled trades and entrepreneurship. This kind of human-capital-centered industrial policy is essential if Africa is to transform its economies from extractive to productive.

This essay explores three interlinked strategies to drive that transformation: Skill-Backed Lending, Apprenticeship-for-Ownership, and Pan-African Trade. Each model targets a critical node of economic stagnation – access to capital, access to skills, and access to markets. Together, they form a blueprint for self-reliant and inclusive development. Africa's future must be built not on aid or extraction, but on the ingenuity, labor, and enterprise of its own people. As Nelson Mandela once said, “It always seems impossible until it's done.” Africa's transformation may be complex, but the tools for change lie within its grasp.

¹ Tala (2022). “Impact Report.” <https://tala.co/wp-content/uploads/2023/03/Impact-Report-2022.pdf> (last accessed 17 June 2025)

2. Skill-Backed Lending: Unlocking Africa's Human Capital

2.1. The problem: a barrier to dreams

Imagine a young woman in a remote African village, brimming with talent, ambition, and skill but without land, savings, or any formal assets. She dreams of opening a bakery, a tailoring shop, or even launching a small tech startup. But one thing stands in her way: access to capital. In most African countries, formal financial institutions still operate on outdated models that require physical collateral—property, land titles, or large savings. Without these, her dream remains just that—a dream.

While digital financial inclusion has expanded rapidly across the continent, especially through mobile money, credit access remains dismally low for large segments of the population. According to the World Bank Group (2021), although 55% of Sub-Saharan African adults now have access to a financial account—largely due to mobile money platforms—formal credit remains a distant goal for most, especially women, rural residents, youth, and those with limited education. In many countries, fewer than 10% of adults have borrowed from a formal financial institution. The obstacles are well-known: lack of collateral, no credit history, irregular incomes from informal work, and high interest rates. The result? Over 80% of adults are excluded from the formal credit system (World Bank, 2021), which perpetuates cycles of poverty, unemployment, and underutilized human potential.

2.2. The solution: skill-backed lending

What if banks and lenders stopped asking, What do you own? and instead asked, What can you do? This is the philosophy behind skill-backed loans, a novel approach to credit access rooted in the belief that human capital—skills, experience, training—is a valid and measurable form of value. Instead of collateralizing land, borrowers would use proof of their ability: trade certifications, portfolios, apprenticeships, customer feedback, or work history.

This idea is partly inspired by Muhammad Yunus, who pioneered microcredit by replacing collateral with social trust. His work with Grameen Bank in Bangladesh showed that belief in, and access to capital can help people escape poverty (Yunus & Jolis, 2000, pp. 102–115). However, unlike trust-based, group-guaranteed microcredit, skill-backed loans rely on verified expertise as collateral. They also avoid the high effective interest rates of microcredit—such as Grameen's 10% flat rate (~20% annually)—by using tech-driven efficiencies and broader risk-sharing (Grameen, 2009, pp. 45–48).

2.3. An emerging precedent: Kenya's Tala pilot

This concept is already gaining traction. Tala, a Kenyan fintech lender, offers small loans—averaging around \$36—to artisans, skilled workers, and other underserved individuals who lack traditional collateral. Instead of relying on property or savings, Tala evaluates applicants using alternative data such as mobile-money and phone usage patterns, mobility information, social network dynamics, and customer feedback captured via its app (Layne, 2025, para. 14, 15). These approaches suggest that inclusive, skill-conscious lending is not just aspirational—it can be both practical and scalable.

2.4. How skill-backed loans work

At its core, skill-backed lending requires shifting the definition of collateral. Here's how such a system would function:

Eligibility Based on Skills:

Borrowers submit portfolios, trade certificates, and endorsements from clients or supervisors. A tailor might share samples of past work; a plumber could verify training through a trade association.

AI-Driven Credit Scoring:

AI-Driven Credit Scoring is a modern method of assessing a borrower's creditworthiness using artificial intelligence (AI) algorithms to analyze a wide range of data beyond traditional financial records. Unlike conventional scoring, which depends on bank accounts, formal salaries, and credit history, AI models include nontraditional factors such as work history, quality of outputs, prior earnings, and social reputation to create a skill-based credit score. This approach is more inclusive and better at predicting repayment success, especially for those in informal or gig economies. It captures a borrower's ability to generate income and maintain consistent work, making credit access fairer and more reliable.

Blockchain Certification:

Blockchain Certification uses blockchain technology—a decentralized, secure digital ledger—to store, verify, and protect educational credentials, training certificates, and skills records. Since blockchain data is immutable and transparent, lenders can instantly verify a borrower's credentials, ensuring authenticity and reducing fraud risk. This solves a major challenge in skill-backed lending by preventing forgery and enabling real-time qualification checks. Ultimately, it protects both borrowers and lenders and builds trust in the system.

Mobile Integration:

With mobile penetration exceeding 70% across much of Africa, mobile apps provide an accessible platform for loan applications, repayments, and support—even in remote areas.

2.5. Implementation strategy

To operationalize skill-backed loans across African economies, we propose a condensed three-phase model: Policy and Technology, Implementation, and Scaling.

Phase 1: policy and technology

For skill-backed lending to succeed, governments must create strong legal frameworks that recognize certified skills as valid collateral. This involves updating financial regulations, especially banking laws, to include non-physical assets like vocational certificates and verified portfolios in credit assessments. Accreditation of training institutions is crucial to give credentials legal authority. Additionally, national skill registries should be established to standardize and store these credentials, providing a reliable foundation for lenders and borrowers.

A second critical component is building infrastructure to score and verify skills. Traditional credit scoring often excludes informal workers, freelancers, and vocational graduates, so alternative systems are needed. AI-driven tools can assess portfolio quality, work history, and

client feedback, while being sensitive to local labor markets. To boost trust, blockchain-based credentialing can securely store and verify certificates from NGOs and vocational institutions, preventing forgery and increasing lender confidence.

Finally, mobile technology plays a key role in expanding access to skill-backed lending. Mobile phones can serve as the main interface for borrowers, enabling them to upload work samples, access tailored loan products, track repayment schedules, and receive financial education. This mobile-first approach is particularly important in regions with limited physical banking infrastructure and ensures that underserved populations are not left behind in the transition toward inclusive credit systems.

Phase 2: Implementation through targeted pilots and incentives

Skill-backed lending should start with pilot programs in sectors rich in skills but lacking traditional collateral, such as tailoring, carpentry, farming, and digital freelancing. These fields involve measurable, valuable skills but often exclude workers from formal finance. Artisans and tradespeople benefit by proving competence through their work rather than assets. Women entrepreneurs, who often lack land or formal collateral, also gain access. Likewise, unemployed youth and recent graduates with vocational or informal experience can secure loans based on their skills instead of credit history.

To reduce risks in new lending models, governments and NGOs can provide loan guarantees during pilot phases. These guarantees absorb losses and ease lender concerns, encouraging financial institutions to participate. Development partners like the World Bank and African Development Bank could co-finance guarantees or subsidize interest rates to improve access. By sharing initial risks, they help build confidence, speed adoption, and support long-term sustainability.

An innovative repayment model for skill-backed lending allows borrowers to repay part of their loan through community services. For example, a tailor with a \$500 loan could make school uniforms for public schools, while a mechanic could offer discounted repairs for government vehicles. This creates a threefold benefit: borrowers access capital, lenders are repaid through services, and communities gain affordable goods or support. By linking repayment to public service, the model fosters goodwill and strengthens local social and economic ties.

Phase 3: Scaling through market integration and ecosystem support

Once skill-backed lending proves viable through pilot programs, the next step is inclusive scale-up. This means actively closing access gaps that might exclude marginalized groups. Many potential borrowers—especially in rural or low-income areas—may lack the digital literacy to use mobile platforms or understand credit terms, making public education vital. Financial products should also be gender-inclusive, with features like flexible repayment schedules or incentives linked to childcare, better supporting women entrepreneurs. At the same time, partnerships with vocational schools and universities can create structured pathways for youth, allowing graduates to enter credit systems using certified skills as collateral.

Public-private partnerships will be critical in scaling these systems nationally and across borders. Commercial banks can provide the capital and underwriting infrastructure, while technology companies supply the scoring models, mobile platforms, and data tools required to assess borrower risk. Governments must play an enabling role by delivering the necessary policy frameworks, legal protections, and regulatory oversight. These tripartite collaborations will ensure not only efficiency and innovation but also accountability and long-term alignment with national development goals.

The ultimate aim is to establish a sustainable, normalized ecosystem in which skill-backed lending becomes a mainstream financial instrument rather than a niche innovation. This involves institutionalizing support systems, such as the creation of regional and national credit bureaus dedicated to tracking skill-based lending activity and repayment performance. Similarly, pan-African accreditation bodies can harmonize vocational certification standards, making it easier to assess skill value across borders and sectors. Encouraging private investment into well-performing portfolios of skill-backed loans will further deepen market integration, channeling capital into productive talent and fostering inclusive economic growth at scale.

2.6. Why it matters

Skill-backed lending represent more than just financial innovation—it is a reimagining of value itself. Africa has the youngest population in the world, with over 60% under the age of 25. This demographic profile can either propel or burden the continent. Traditional finance systems—anchored in asset-based collateral—exclude millions from opportunity. But with a shift toward human capital, Africa can unleash a new wave of entrepreneurs, artisans, and innovators. The barriers are real. But so is the potential. By collateralizing talent, rather than title deeds, we not only democratize finance—we redefine what it means to be creditworthy in the 21st century.

Let us imagine a continent where a woman's skill with a needle, a young man's carpentry craftsmanship, or a graduate's coding portfolio holds the same financial weight as a deed to land. That is the promise of skill-backed lending—a promise Africa is ready to keep.

3. Apprenticeship-for-Ownership Model: Building Inclusive Economies through Worker Equity in Africa

Africa's economic challenges are deeply rooted in structural inequities and a historical legacy of colonization, resource extraction, and global marginalization. Despite its abundant resources, Africa remains disproportionately poor. A significant cause is the model of economic participation that renders workers as mere tools in the production process rather than stakeholders in wealth creation. To address this issue, this paper proposes the Apprenticeship-for-Ownership model—a phased, equity-based approach that transitions workers from laborers to co-owners of enterprises. Rooted in principles of inclusive development, the model draws inspiration from successful cooperative movements and emphasizes African agency, regional integration, and institutional innovation.

3.1. The problem: structural exploitation and limited worker empowerment

Africa's workforce is one of its greatest assets. Yet, millions of workers face low wages, precarious employment, limited career mobility, and little stake in the prosperity they help create. This pattern is not accidental but structurally embedded. Historically, African economies were shaped to serve colonial interests, prioritizing raw material extraction over local value addition. Post-independence, many countries inherited centralized, elite-driven economies with little room for grassroots participation. Today, while foreign direct investment and multinational corporations play a visible role, they often extract value without deeply embedding benefits into local communities.

The result is a cycle of dependency, inequality, and underdevelopment. African workers contribute their labor, time, and creativity to enterprises but remain excluded from ownership, profit-sharing, and decision-making. This exclusion reinforces poverty, limits innovation, and undermines national economic sovereignty.

3.2. The solution: the apprenticeship-for-ownership model

To challenge this structure, the Apprenticeship-for-Ownership model offers an inclusive pathway where workers gradually become co-owners of the businesses they help build. Unlike traditional employment, this model ensures that contributions of labor are reciprocated not just with wages but with equity.

Inspired by Spain's Mondragon Corporation (Morris, 1992), the model is adaptable to African realities. It aligns with the traditional Igbo apprenticeship system in Nigeria, where labor leads to skill development and business ownership, showing its practical viability in Africa (Okloi, 2022, pp. 18, 19). The model not only creates wealth but also embeds economic power within communities, ensuring that value generated locally stays local.

3.3. Economic benefits of the apprenticeship-for-ownership model

The apprenticeship-for-ownership model offers a transformative path to wealth creation in Africa by allowing workers to build equity in the businesses they help grow. Instead of remaining wage laborers, apprentices gradually become part-owners, gaining dividends, profit-sharing, and capital appreciation. This fosters financial security and a strong sense of ownership. The model echoes Spain's Mondragon Corporation, a federation of worker cooperatives where members receive annual surpluses based on company performance.² In many rural African areas with limited banking access, community-based equity participation also serves as a practical alternative to traditional savings, helping communities build wealth without relying on exploitative financial institutions.

Beyond wealth creation, the model also boosts job creation and retention, especially during downturns. Employee-owned firms have shown greater resilience in crises; in the U.S., they laid off fewer workers during the 2008–2009 recession (Blasi et al., 2013, pp. 101–124). This is because worker-owners balance immediate income with long-term sustainability, often opting for pay cuts or reinvestment over layoffs. For African economies marked by informal work and job insecurity, the apprenticeship-for-ownership model offers not just jobs, but stable, meaningful participation in production.

One of the model's greatest benefits is strengthening local industries. When workers own enterprises, profits are more likely to stay and be reinvested locally. This counters the extractive practices of foreign firms. For example, South Africa exports iron ore but relies on imported steel—hindering job creation and industrial growth. Worker-owned businesses tend to support local procurement and reinvestment, helping build an integrated manufacturing base aligned with AfCFTA goals.

3.4. Social benefits of the apprenticeship-for-ownership model

The apprenticeship-for-ownership model can reduce inequality by redistributing both income and capital. Unlike traditional wage systems that concentrate profits among owners, co-ownership lets workers share in a company's success. This shift helps counter Africa's deep-rooted socioeconomic disparities. U.S. studies show that employees with stock options build more wealth than those without (Kruse et al., 2010, ch. 8). By expanding access to ownership, the model creates economic opportunities for marginalized groups—informal workers, rural communities, and women—challenging long-standing exclusion.

² Co-operative News (2018). "Mondragon changes rules around the distribution of dividends." Co-operative News. <https://www.thenews.coop/mondragon-changes-rules-around-the-distribution-of-dividends/>

Beyond reducing inequality, the model boosts motivation and productivity by reshaping workers' relationship to the firm. As co-owners, employees gain financial and emotional investment in the enterprise. Blasi et al. (2013, ch. 2) call this the "psychological ownership effect," which leads to greater initiative, commitment, and lower turnover. In African contexts marked by job dissatisfaction and limited mobility, shared ownership fosters engagement and long-term thinking—key for sustainable industrial growth.

The model also fosters skill development, as ownership requires more than labor—it demands governance, financial literacy, and strategic thinking. Apprenticeship-for-ownership programs include training in these areas, building competencies beyond the workplace. Mondragon, for example, educates members in democratic decision-making and planning (Meek & Woodworth, 1990). In parts of Africa with limited formal education, such models double as platforms for adult learning, supporting human capital and economic citizenship.

3.5. Regional benefits of the apprenticeship-for-ownership model

The apprenticeship-for-ownership model directly supports AfCFTA by fostering local, interconnected production systems that enable cross-border trade. AfCFTA aims to boost intra-African commerce by cutting tariffs and harmonizing trade rules, but this requires strong, homegrown industries (Byiers et al., 2021, pp. 3–9). Worker-owned enterprises fill this gap by rooting supply chains in local communities, keeping production and value addition within Africa. For example, linking Rwandan agricultural cooperatives with Ghanaian worker-owned food processors helps profits and jobs circulate regionally, strengthening economic resilience. Unlike foreign subsidiaries that often repatriate profits, locally owned firms build a self-sustaining African economy and promote continental sovereignty.

The model also promotes environmental and social sustainability by aligning business decisions with local community welfare. Worker-owned firms, rooted in their communities, encourage long-term thinking and responsible stewardship. Cooperatives often outperform conventional firms in sustainability by investing in training, knowledge sharing, and member services that support eco-friendly farming (Candemir et al., 2021, pp. 1125–1126). In Murang'a County, Kenya, dairy cooperatives helped 87% of farmers adopt at least two climate-smart practices—like improved fodder and manure management—through peer education and collective action (Maindi et al., 2020, Table 3). Because business incentives directly reflect member-owners' well-being, worker-owned firms naturally embed sustainability into their operations rather than seeing it as an external duty.

3.6. Implementation plan

Phase 1: Legal and Institutional Frameworks

Rolling out the apprenticeship-to-ownership model requires a strong legal and institutional base. Governments should adopt voluntary equity-sharing policies allowing businesses to shift to worker ownership over 3–5 years, supported by incentives like tax breaks or preferential government contracts. Public recognition—through awards or media—can further encourage adoption by showcasing successful cases. A national Apprenticeship Equity Commission (AEC) should oversee fairness, protect all parties, and ensure transparency. Clear legal frameworks must define equity terms—voting rights, dividends, and exit rules—to encourage participation and safeguard workers from exclusion or exploitation.

Phase 2: Pilot and Rollout

To ensure impact and feasibility, implementation should start in sectors with high potential for inclusive ownership—manufacturing, agriculture, and technology. These industries employ much of the informal labor force and offer opportunities for local value addition. Embedding the model here can reduce underemployment and boost domestic industry. Public-private partnerships will be key: governments, banks, and development partners should co-fund cooperatives and startups, especially in undercapitalized areas. These partnerships can lower investment risks and create pilot projects that build trust in the model. Capacity building is equally vital. Workers must gain skills in finance, governance, and entrepreneurship to succeed as co-owners. Institutions like the African Union, national training bodies, and universities should co-create training tailored to informal workers. Without this knowledge, failure may result from poor internal management rather than market forces.

Phase 3: Scaling and Institutionalization

As the apprenticeship-for-ownership model matures, a structured scaling and institutionalization phase becomes essential to ensure its long-term viability and replicability across different sectors and regions. A critical component of this phase is the establishment of a robust monitoring and evaluation framework. Impact audits should be systematically conducted to track key metrics such as employment growth, wage progression, productivity improvements, and enterprise sustainability. These audits can help identify successful practices, surface challenges early, and provide empirical evidence to guide policy refinement and donor engagement. By quantifying both economic and social returns, such evaluations lend credibility to the model and encourage broader adoption by governments and financial institutions.

After initial focus on industries like manufacturing and agriculture, later phases should target sectors such as healthcare, education, and retail—especially those tied to community welfare. Converting rural clinics or schools into worker-owned entities can improve service delivery, job stability, and accountability. Likewise, retail cooperatives can expand employment and access in underserved areas. Broadening into these sectors shows the model's versatility and relevance across diverse contexts.

Finally, the long-term success of worker-owned enterprises relies on strong risk mitigation systems to protect members' assets and livelihoods. Since worker-owners invest both labor and capital, tools like insurance, liquidity buffers, and stabilization funds are vital to shield enterprises from shocks such as market downturns or disasters. Institutionalizing these safeguards ensures collective risk-sharing and minimizes individual losses. With such measures, the apprenticeship-for-ownership model can evolve into a stable pillar of Africa's economic transformation.

3.7. Challenges and solutions

Voluntary Participation

A key strength of the Apprenticeship-for-Ownership model is its voluntary nature—but this also poses a challenge: what if workers opt out? Fear of the unknown, lack of understanding, or focus on short-term income can deter participation. In low-income settings, immediate needs often outweigh long-term goals. A phased, supportive rollout is vital. Education campaigns using real-life examples from Rwanda and Mondragon can highlight benefits. Trusted community figures can build confidence, and flexible onboarding lets workers join when ready. Hybrid models—mixing traditional employment with ownership—can ease adoption. As dividends and success stories emerge, participation will likely grow through peer influence.

Corruption and Governance Risks

Corruption poses a serious risk to the success of the Apprenticeship-for-Ownership model, particularly in countries with low institutional trust. The challenges include potential misallocation of shares, elite capture of cooperative leadership, and political interference—issues that can erode credibility and discourage participation. To counter this, technological and institutional safeguards must be prioritized. Implementing blockchain technology to transparently record share ownership and all financial transactions would significantly reduce opportunities for fraud, favoritism, and opaque management. Furthermore, mandatory independent audits—especially for cooperatives receiving public funding—can provide an additional layer of credibility. Each worker-owned enterprise should also establish elected Worker Oversight Councils to monitor leadership and business performance from within. Finally, digital platforms accessible via mobile and web dashboards should be used to publish regular updates on finances, dividend payments, and key decisions. When workers are informed and empowered, governance becomes more participatory, transparent, and resilient.

Business Resistance

Private business owners may resist transitioning to employee ownership, particularly if they view it as a threat to control, profits, or traditional hierarchies. Such resistance could stall adoption of the model, especially in family-owned enterprises or sectors with rigid management cultures. To encourage buy-in, the model must demonstrate that co-ownership can be a win-win. Governments can introduce tax incentives, such as reduced corporate income taxes for companies that transition to partial or full employee ownership. Additionally, access to capital should be linked to co-ownership: companies could receive low-interest loans or grants only if they commit to gradually transferring shares to their workforce. Public recognition also matters—reputational incentives like national awards, media visibility, or AfCFTA-backed certifications can help establish prestige around ethical and inclusive business practices. By framing ownership sharing as a strategic upgrade rather than a surrender, the model becomes more appealing to business leaders.

Funding Constraints

Scaling the Apprenticeship-for-Ownership model requires substantial capital—not only to convert existing businesses into cooperatives but also to launch new ones. The cost of training, infrastructure, and seed equity must be covered without placing undue burden on workers or early-stage enterprises. A practical solution is the creation of Worker Equity Funds, co-financed by governments, multilateral partners like the African Development Bank (AfDB, 2024), and philanthropic investors. These funds can co-finance startups and cooperative conversions, ensuring that capital gaps do not exclude lower-income participants. They can also underwrite governance and financial literacy training, preparing workers for their new roles as co-owners. Finally, Worker Equity Funds should include fallback reserves—financial cushions that can absorb the impact of business failures without devastating worker livelihoods. With these safeguards, the model can expand responsibly and inclusively.

Cultural Shifts and Mindset

Shifting mindsets from wage dependency to ownership is a long-term challenge rooted in colonial legacies and hierarchical labor norms. To help workers see themselves as value creators, both education and inspiration are key. Embedding cooperative economics into school curricula can instill this early, while business and civic courses should include African cooperative case studies. Media campaigns—via storytelling, radio dramas, and short videos—can highlight real-life success stories, making co-ownership relatable. Gradually, this will help reframe ownership as a shared right, not just an elite privilege.

3.8. Toward a sovereign and inclusive economy

The Apprenticeship-for-Ownership model is more than a policy—it is a reimagining of Africa’s economic foundation. By transitioning workers from laborers to co-owners, it addresses structural injustice while creating sustainable wealth. It offers a path to inclusive capitalism rooted in African realities.

Importantly, the model complements broader continental goals such as Agenda 2063 and the AfCFTA by promoting self-reliance, industrialization, and intra-African trade. Implementation will not be without difficulty. But with visionary leadership, participatory governance, and smart technology, Africa can pioneer a new model of development—one where workers are not just employed but empowered.

Africa’s future lies not in waiting for foreign investment but in unlocking the wealth of its people. Ownership is not just an economic tool—it is a human right, a source of dignity, and a foundation for lasting development.

4. One-Continent, One-Supply Chain

Africa is often described as a continent of abundance. It is home to vast mineral reserves, fertile land, rich biodiversity, and significant energy resources, including oil and gas. Yet, despite this natural wealth, many African countries continue to struggle with poverty, unemployment, and underdevelopment. Africa’s continued dependence on exporting raw commodities, combined with low domestic resource mobilisation, limits its ability to fund inclusive and transformative development (AfDB, 2025, p. 7). When raw materials are processed abroad and re-imported as finished goods, Africa not only loses potential revenue but also misses opportunities to develop local industries and jobs.

The vision of a One-Continent, One-Supply Chain—a coordinated, continent-wide manufacturing and trade strategy—offers a compelling alternative. Anchored in the goals of the African Continental Free Trade Area (AfCFTA), this policy framework aims to shift African economies from extractive models to integrated value-adding system. The next step is continent-wide collaboration to build an intra-African supply chain that retains wealth, fosters industrialization, and drives inclusive development.

4.1. Problem: raw material dependency and disjointed production

Despite its resource wealth, Africa remains economically dependent on the export of unprocessed commodities. According to Afreximbank (2024, p. 65), over 70% of Africa’s exports are primary commodities, While intra-African trade remains low, accounting for just 18% of the continent’s total trade—a figure strikingly lower than that of other regions such as Asia and Europe (Afreximbank, 2024, p. 19). For instance, Nigeria exports crude oil but lacks refining capacity, forcing it to import refined petroleum products. Similarly, South Africa exports iron ore but imports steel due to insufficient domestic manufacturing infrastructure.

This reliance on external processing leads to value leakage—foreign firms capture most of the profits from African resources—while local industries remain underdeveloped. The consequences are systemic: low job creation, limited innovation, and continued economic vulnerability. Without coordinated investment in local production, Africa’s resource wealth will continue to benefit others more than its own people.

4.2. Solution: building a one-continent, one-supply chain

To reverse this trend, African countries must work together to build a One-Continent, One-Supply Chain—a strategic, integrated system that focuses on local processing, manufacturing, and intra-continental trade. This policy initiative aligns with AfCFTA’s goals of increasing regional value chains and reducing barriers to trade. It envisions a scenario where resources are not just exported, but transformed into finished goods within Africa’s borders, strengthening economic sovereignty.

Evidence shows the transformative potential of local processing. For example, Zambia’s investment in domestic copper processing is part of broader reforms that have supported economic recovery, with GDP growth projected at 4.5% in 2024 and 6.6% in 2025, driven by mining, manufacturing, and renewed investor confidence (AfDB, 2024). Coordinated efforts—such as linking Nigeria’s oil production with refining hubs in neighboring states, or integrating agricultural supply chains from East to West Africa—can create millions of jobs, reduce import dependency, and strengthen resilience to global shocks.

Moreover, with institutions like the African Union, Afreximbank, and regional economic communities offering policy and financial support, the infrastructure to implement this vision is already emerging. The challenge now lies in political will, investment coordination, and harmonizing industrial policies across borders.

4.3. Benefits

Value Addition

Local processing transforms Africa’s role in global value chains from a mere exporter of raw materials to a producer of finished goods. This not only multiplies revenue but also fosters industrial development. For example, exporting raw cocoa yields about \$2,000 per ton, whereas processed chocolate can earn over \$10,000 per ton in international markets. By retaining the manufacturing stage, African countries capture more economic value, increase tax revenues, and enhance technological capability. Countries like Ghana and Côte d’Ivoire have begun implementing policies to process more of their cocoa domestically, signaling a shift toward value addition.

Job Creation

Manufacturing is labor-intensive and has historically driven large-scale employment in developing countries. Ethiopia’s textile and garment sector illustrates this potential: supported by government and foreign investment, industrial parks like Hawassa have created around 30,000 jobs, with potential to reach 60,000 (UNIDO, 2018), primarily for young women. Beyond direct employment, manufacturing ecosystems stimulate job growth in logistics, supply chain management, maintenance, and other support services, creating a multiplier effect across the economy. Industrialization also provides an entry point for upskilling the workforce.

Intra-African Trade

The African Continental Free Trade Area (AfCFTA), the world’s largest free trade area by number of countries, aims to eliminate 90% of tariffs and reduce non-tariff barriers. By easing trade across borders, AfCFTA incentivizes local sourcing of intermediate goods and promotes specialization across the continent. For instance, instead of importing machinery from Europe, Kenyan firms could source components from South Africa or Egypt. This fosters economic integration, boosts regional value chains, and supports SMEs by expanding their market access beyond domestic borders.

Infrastructure

Efficient infrastructure underpins industrial competitiveness. Investments such as the Standard Gauge Railway (SGR) connecting Mombasa to Nairobi have cut freight costs and halved transportation times. Improved roads, ports, and energy infrastructure reduce production costs and attract foreign direct investment. For example, electricity access in Rwanda—driven by government investment in renewable energy and grid expansion—has significantly increased industrial productivity. Infrastructure development also connects rural producers to urban and export markets, expanding opportunities for inclusive growth.

Local Businesses

Homegrown African companies like the Dangote Group in Nigeria play a critical role in reducing reliance on foreign corporations. Dangote's cement factories, for instance, have helped make Nigeria self-sufficient in cement and enabled exports to neighboring countries. Supporting such firms through favorable policies, access to credit, and infrastructure empowers them to scale, innovate, and compete globally. Local businesses also tend to reinvest profits domestically, strengthening national economies and building long-term resilience.

Resilience

The COVID-19 pandemic exposed the fragility of global supply chains. Africa faced delays and shortages in essential goods like personal protective equipment and food due to overreliance on imports. Developing regional supply chains—where inputs and final goods are produced and exchanged within Africa—can mitigate such risks. For instance, South Africa ramped up local production of medical equipment during the pandemic, supplying neighboring countries. Regional interdependence not only enhances resilience to global shocks but also builds solidarity and shared prosperity.

Global Exports on African Terms

African countries often face trade structures that favor raw material exports while penalizing processed goods. A stark example, as noted by the International Coffee Organization (ICO, 2011, pp. 3, 10), is coffee: while raw beans can be exported duty-free, processed coffee often faces higher tariffs, making it harder for producing countries to benefit from value addition. However, a unified African supply chain—where raw materials, inputs, and services are shared regionally—enhances Africa's bargaining power in global trade negotiations. Coordinated policy frameworks under AfCFTA can help demand fairer trade terms, protect strategic industries, and support the export of finished African products under better conditions.

4.4. Implementation plan

Phase 1: Policy Framework

The African Continental Free Trade Area (AfCFTA) provides the most promising foundation for industrialization in Africa. By eliminating up to 90% of tariffs and addressing non-tariff barriers—such as customs delays, inconsistent product standards, and border bureaucracy—AfCFTA enables the freer movement of goods, services, and capital across borders. Full implementation of its protocols would reduce transaction costs, enhance cross-border collaboration, and support the emergence of continent-wide value chains. To fully harness this opportunity, national governments must align their trade and industrial policies with AfCFTA's framework, ensuring coherence in standards, logistics, and incentives.

To attract regional and international investment into these emerging supply chains, African governments can offer a range of strategic incentives. These may include tax holidays, import duty exemptions on industrial machinery, and fast-tracked licensing for projects that span multiple African countries. Such measures would lower the cost of doing business and encourage partnerships between firms across the continent. For example, a Senegalese enterprise could collaborate with a Ghanaian manufacturer to produce fertilizers, combining raw materials, logistics capacity, and technical expertise to achieve economies of scale.

However, incentives and open markets alone are not enough. A unified supply chain requires a skilled and adaptive workforce. Industrialization depends on technicians, engineers, supply chain analysts, factory operators, and maintenance workers—all of whom must be trained for the future of African industry. Governments must therefore invest in vocational training, technical education, and STEM programs that equip youth with job-ready skills. Nigeria's National Industrial Skills Development Programme and Rwanda's TVET expansion are effective models that can be adapted elsewhere. Ideally, curricula should be co-designed with industry leaders to ensure training aligns with market needs and actual job functions, rather than theoretical knowledge alone.

Phase 2: Infrastructure

A successful One-Continent, One-Supply Chain strategy hinges on a robust and interconnected infrastructure network. Efficient transportation systems are essential to facilitate the movement of raw materials, components, and finished goods across borders. Priority should be given to expanding and linking key railways—such as extending the TAZARA Railway to inland ports—and modernizing strategic seaports like Tema in Ghana and Mombasa in Kenya. These upgrades would significantly reduce logistics costs, improve delivery times, and strengthen regional value chains. Investments must focus on regional corridors that connect industrial zones with domestic markets and international export routes.

Energy infrastructure is equally critical. Without reliable and affordable electricity, industrial production cannot thrive. Many African countries still face frequent blackouts and prohibitively high energy costs. Addressing this challenge will require scaling up renewable energy sources such as solar and wind, which are abundantly available across the continent. These can complement existing hydro and thermal sources, reducing dependency on imported fossil fuels. Initiatives like the West African Power Pool, which facilitates cross-border electricity trading, can help stabilize regional supply. Additionally, off-grid solar mini-grids offer cost-effective electrification for rural industrial zones that are often excluded from national grids.

Finally, the development of regional logistics hubs can dramatically improve the efficiency of supply chain coordination. These hubs—such as bonded warehouses, dry ports, and integrated trade zones—can streamline the storage, packaging, and customs processes that often delay cross-border trade. Public-private partnerships (PPPs) are crucial in establishing these centers. The Kigali Logistics Platform in Rwanda, developed in partnership with DP World, provides a model for success. By strategically positioning such logistics hubs throughout the continent, African countries can cut transit times, lower costs, and boost their competitiveness in global trade.

Phase 3: Industry Development

Accelerating industrial growth in Africa requires strategic integration of technology, targeted investments, and comprehensive support for small and medium enterprises (SMEs). At the forefront of this transformation is the adoption of emerging technologies that can enhance supply chain transparency and efficiency. Blockchain, in particular, holds great promise for

sectors like agriculture, mining, and pharmaceuticals. By allowing producers to digitally record the origin, movement, and processing of goods, blockchain builds trust with international markets, reduces corruption, and enhances traceability. Ghana's pilot program to track cocoa from farm to port is a pioneering example of how such technology can be deployed to strengthen Africa's credibility in global trade networks.

Investment is the next critical pillar. The African Development Bank (AfDB) plays a central role in financing industrialization through its Industrialize Africa strategy, which supports priority sectors such as agribusiness, light manufacturing, and energy (AfDB, 2024). The AfDB provides long-term loans, equity investments, and technical assistance, but its efforts must be complemented by national development banks and sovereign wealth funds. These entities can co-invest in infrastructure such as industrial parks, SME accelerators, and export processing zones that stimulate both domestic production and cross-border commerce.

Equally vital is the empowerment of SMEs—the economic backbone of the continent. These enterprises are often the most agile and innovative, yet they face persistent barriers in accessing capital, markets, and mentorship. To scale their operations, SMEs need startup grants, low-interest financing, and integration into formal supply chains. Governments and pan-African bodies can support this by establishing innovation hubs and business incubators tailored to specific sectors. Ethiopia's leather processing cluster and Kenya's agri-processing initiatives offer replicable models. Moreover, digital platforms can help bridge geographic gaps by offering remote access to funding opportunities, training resources, and market linkages, making industrial participation more inclusive and widespread.

4.5. Challenges and mitigation strategies

Capital Access

A major barrier to Africa's industrial transformation is limited access to long-term, affordable capital. Large projects—like agro-processing zones or regional railways—need patient financing, but most African banks offer only high-interest, short-term loans. SMEs also struggle with insufficient collateral and documentation. To address this, countries should explore alternative financing. Sovereign wealth funds (SWFs), such as the Nigeria Sovereign Investment Authority (NSIA) and Fundo Soberano de Angola (FSDEA), can channel resource revenues into regional investments. Diaspora bonds, which tap into patriotic sentiment, have raised significant funds in places like Ghana. Expanding venture capital—backed by public-private partnerships and first-loss guarantees from institutions like the AfDB—can also support high-growth sectors like manufacturing, green energy, and logistics.

Foreign Trade Barriers

A significant structural challenge to Africa's industrialization is the persistence of foreign trade barriers, particularly in the form of tariff escalation. Wealthy countries often impose higher import duties on processed goods than on raw materials, making it economically disadvantageous for African producers to move up the value chain. This system reinforces Africa's traditional role as a supplier of unprocessed commodities while discouraging value addition, job creation, and technology transfer on the continent.

A stark illustration of this occurred in April 2025 when the U.S. imposed a 10% baseline tariff on all imports and up to 50% reciprocal duties on products from 20 African countries—overriding AGOA's duty-free access. Lesotho's textile exports were hit with a 50% tariff, South Africa 30–31%, and Nigeria 14%, notably impacting processed sectors like apparel, auto parts, and agri-products (Reuters/AP/Analysts).

Such episodes reveal how vulnerable Africa's value-added exports are to shifts in foreign trade policy. To mitigate these risks, African countries must pursue coordinated trade strategies under the AfCFTA. Acting as a bloc can increase Africa's bargaining power in global forums like the WTO, making it harder for large economies to single out individual nations. Moreover, Africa must diversify its trade partnerships beyond traditional Western markets by deepening South–South trade with blocs like ASEAN, Mercosur, and BRICS. Developing reciprocal trade agreements that protect processed goods and codify fair treatment can also shield the continent from the volatility of unilateral preference programs like AGOA.

Foreign Competition

Africa's push for industrialization faces risks from foreign competition. While trade liberalization under the African Continental Free Trade Area (AfCFTA) promises long-term gains, it can expose young African industries to global firms with lower costs and better technology. Sectors like textiles, food processing, and pharmaceuticals risk being outcompeted before reaching scale. To protect them, governments should adopt targeted policies—such as anti-dumping laws and local content requirements. Nigeria's Oil and Gas Local Content Act, which boosted local participation from under 10% to over 40% in ten years, offers a strong example. Phased tariff reductions for vulnerable sectors can also give local firms time to grow and compete effectively.

Political and Bureaucratic Resistance

Africa faces political and bureaucratic resistance that slows regional projects. Diverse national interests, inertia, mistrust, and protectionism hinder shared infrastructure and industrial policies. To overcome this, strategic, gradual steps are needed. Pilot cross-border industrial zones, like the Nigeria–Benin manufacturing corridor, can build trust and demonstrate success. These zones require harmonized regulations, joint governance, and shared infrastructure. High-level political champions—such as rotating AfCFTA “Industrialization Envoys” from Heads of State—can maintain momentum and accountability. Bureaucratic delays should be reduced through digital tools like a continent-wide “Single Window” for trade to streamline customs, licensing, and compliance. Transparent platforms will cut corruption, speed approvals, and boost investor confidence.

This policy transforms Africa into a manufacturing leader, ensuring prosperity. While it will increase the share of African products consumed within the continent, it also positions Africa to export value-added goods globally on fairer, more beneficial terms.

5. Conclusion

Africa's abundant natural resources and youthful population position it for transformation, yet the continent continues to grapple with economic hardship rooted in historical exploitation and dependence on raw exports. To reverse this trend, industrialization, financial inclusion, and intra-African trade are not optional—they are essential strategies for building a resilient, self-reliant economy.

Concrete models already exist. Kenya's Tala has piloted skill-backed microloans that empower individuals with both capital and capability. Rwanda's cooperative-based apprenticeship-for-ownership system exemplifies how inclusive training and shared ownership can build local industries. Meanwhile, the One-Continent, One-Supply Chain strategy—underpinned by the AfCFTA—offers a path toward integrated value chains and reduced external dependency (UNDP, 2023).

To realize these visions, policymakers must prioritize full implementation of AfCFTA and invest heavily in skill development and youth entrepreneurship. Economic empowerment does not exist in a vacuum—it creates the fiscal capacity to improve healthcare, address climate challenges, and fund sustainable development across sectors.

Africa's future is not confined to the margins of the global economy. With decisive leadership and collective effort, the continent can become a key player in global markets. As Nelson Mandela aptly said, "It always seems impossible until it's done." Africa's economic revolution is not a distant ideal—it is both necessary and achievable through bold, coordinated action.

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**Education in Motion: Exploring the Use of Non-formal Education
as a Pathway to Greater Civic Engagement Among African Youth****Grace Gondwe**

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Abstract: Africa's This article examines how non-formal education (NFE) cultivates civic agency among African youth. Drawing on experiential learning theories and comparative case studies from Africa, it argues that NFE provides a transformative pathway for youth civic participation by integrating leadership, reflection, and practical engagement. Through analysis of programs such as Tostan's Community Empowerment Program in Senegal and the Solar Mamas initiative in Zanzibar, the paper demonstrates that NFE fosters both collective and individual empowerment, albeit with varying levels of sustainability and institutional linkages. The discussion highlights the need for policy frameworks that integrate NFE into national systems without diluting its participatory essence. It concludes that the transformative potential of NFE lies in its non-linear, context-specific design and its capacity to bridge civic learning with governance participation.

Keywords:

1. Non-Formal Education
2. Governance
3. Youth Participation

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1. Introduction: Africa's Youth at the Global Table: Reimagining Education for Governance Participation

Across Africa, a new generation of youth stands ready to lead but remains underserved by education systems that privilege examination performance over applied competence. As the African Union secures a permanent seat at the G20 and African leaders assume more significant roles in global governance, the issue of youth preparedness becomes increasingly urgent. Despite Africa's demographic dividend, formal education continues to produce graduates with limited civic and leadership capacities. This article explores how non-formal education (NFE) can bridge this gap.

This article explores how non-formal education (NFE) can foster civic competence and participation in governance among African youth, emphasising the importance of specific

conditions such as community involvement, institutional support, and resource availability. Defined here as structured learning outside formal schooling, NFE integrates practical engagement, reflection, and leadership development. The central question guiding this paper is: How does NFE foster civic competence and participation in governance among African youth, and under what conditions, such as local leadership, funding, and policy support, does it do so effectively? The article demonstrates how experiential learning theories are operationalised within African contexts, highlighting factors that influence success and sustainability.

2. Background

Africa's burgeoning youth population presents both an unparalleled opportunity and a profound challenge for governance and civic engagement. Despite their demographic dominance, African youth remain markedly underrepresented in political institutions and decision-making bodies. Van Gyampo and Anyidoho (2019) argue that youth remain largely excluded from political participation across much of Africa despite their demographic strength. The continent's median age hovers around 19, yet many septuagenarian national leaders highlight the generational disconnect between those who govern and those they govern.

Defined here as structured, experiential learning outside formal schooling, NFE offers a strategic pathway to bridge this gap, because even small investments in NFE can yield disproportionately large gains in a young person's ability to engage and lead in civic life. NFE enables learning through iterative cycles of experience, reflection, and action, offering alternative pathways to civic participation for young people who are excluded from conventional ones.

Structural barriers reinforce this exclusion. High unemployment, financial precarity, institutional resistance that confines youth to party "wings," and entrenched societal attitudes questioning their leadership capacity all limit participation. Today's youth are better educated than previous generations; 64% have attained at least some secondary education, compared with 35% among those aged 56 and older (Afrobarometer, 2023). However, the issues persist. Higher literacy levels have not translated into political agency, and voter turnout among young people consistently lags behind that of older citizens (Afrobarometer, 2023).

Evidence illustrates how NFE can bridge this gap. Kuenzi (2006) found that adults who participated in community empowerment workshops in Senegal, an NFE form, were more likely to vote and to contact officials than peers with comparable levels of formal schooling. Similarly, programs like *Solar Mamas* in Zanzibar demonstrate how experiential learning enables women with minimal formal education to become solar engineers and community leaders. Such outcomes underscore that NFE not only builds skills but also catalyses civic consciousness, creating entry points for political and social participation where formal education has fallen short.

3. Theoretical Framework

"The analysis draws on experiential learning theories, including Kolb's (1984) Experiential Learning Cycle, Jarvis's (1987) concept of disjuncture, and Boyd's (1996) OODA Loop, which stands for Observe, Orient, Decide, Act, a decision-making model emphasising adaptive learning through action. Kolb's model highlights learning as a cyclical process of experience, reflection, conceptualisation, and experimentation, while Jarvis underscores how disruption, or "disjuncture," triggers transformation. Boyd's OODA Loop adds an adaptive dimension, emphasising rapid iteration and decision-making under dynamic conditions.

These frameworks collectively reflect the dynamic, context-responsive nature of learning within NFE. Unlike traditional schooling, which follows a fixed, linear progression from one grade to the next, NFE mirrors real life, where learning happens through a mix of trial and error, setbacks and breakthroughs, reflection and re-engagement. Civic learning in this context does not unfold in straight lines but through adaptive cycles of experience, adjustment, and growth. This understanding shapes the analysis of how African youth develop civic agency through active participation in NFE programs.

4. Methodology

In this study, we employ two qualitative research methodologies to explore the role of NFE, experiential learning, and apprenticeships in enhancing civic engagement among youth: qualitative case study analysis and comparative analysis.

This study employs a qualitative, desk-based comparative analysis of documented NFE initiatives. Case selection followed a purposive strategy to capture thematic diversity and geographic representation. Data sources included peer-reviewed studies, organisational reports, and independent evaluations.

Each case was analysed using a structured lens that considers: (1) context and issue, (2) the educational intervention, (3) observed outcomes, and (4) governance implications. This structure enables both within-case analysis and cross-case comparisons, revealing patterns, best practices, and contextual factors that influence program effectiveness. The methodology is informed by a case-oriented comparative approach, which prioritises understanding each case in its own right before drawing thematic conclusions.

By synthesising empirical evidence from a range of documented NFE initiatives, this desk review contributes to the growing body of literature on alternative education pathways and their role in preparing youth for civic life and global governance. It also lays the groundwork for future research and policy discussions on scaling NFE across the continent as a strategic mechanism for democratic renewal and youth-led development.

5. Comparative Case Studies

This section analyses two NFE initiatives that illustrate distinct yet complementary pathways to civic empowerment. The Tostan Community Empowerment Program in Senegal demonstrates how NFE can shift entrenched social norms and embed democratic practices at the community level. At the same time, the Solar Mamas initiative in Zanzibar shows how technical competence can evolve into civic legitimacy and gendered leadership. Together, they exemplify how experiential and participatory learning can lead to more inclusive, accountable, and community-driven decision-making, which are key components of meaningful governance reform.

5.1. Tostan (Senegal)

The Tostan Community Empowerment Program¹ (CEP) in Senegal exemplifies how NFE can catalyse profound social transformation from the grassroots up. Operating outside the formal school system, Tostan's three-year program uses storytelling, theatre, and rights-based dialogue to engage whole communities, youth, elders, women, and religious leaders in collective civic learning. This approach makes education a community event, rather than an individual pursuit.

¹<https://tostan.org/> and Tostan n.d.

At its core is the Community Management Course, which invites participants to examine human rights, health, and democracy in direct relation to lived experience. For example, abstract concepts like equality and bodily autonomy are grounded in open conversations about culturally entrenched practices such as female genital cutting (FGC) and child marriage. By doing so, the program replaces rote learning with what Kolb (1984) calls “abstract conceptualisation,” where participants reflect, dialogue, and then act.

Through Tostan, communities do more than learning about democracy; they practice it. Through structured deliberation and consensus-building, participants learn to negotiate, resolve disputes, and take collective decisions that bridge gender, generational, and status divides. One of the most striking outcomes of this process has been the coordinated public declarations to abandon FGC, which have now been adopted by over 9,000 communities across eight countries (Trueblood & Kediran, 2019). In many of these communities, women who previously had no formal education now chair local committees, mediate conflicts, and represent their villages in meetings with government officials. These changes reveal not only increased civic literacy but also a tangible sense of agency and belief in participatory governance.

Tostan’s model has also contributed to institutional development. Local committees formed through the program have petitioned for improved health services, sanitation infrastructure, and girls’ education, engaging elected officials and holding them accountable. In this way, NFE becomes a channel through which marginalised voices enter formal governance arenas.

Yet, the program’s success is fragile. It relies heavily on trained facilitators and deep community involvement. Attempts to scale the model too quickly have led to a loss of quality and consistency in delivery, and the impact risks becoming symbolic rather than genuinely transformative (Boyden, 2017). Tostan thus highlights both the promise and complexity of scaling NFE: the need to expand reach while preserving the participatory methods that make such programs effective.

5.2. Solar Mamas (Zanzibar)

In Zanzibar, the Solar Mamas² initiative illustrates how NFE grounded in technical learning can not only equip individuals with practical skills but also elevate them to positions of civic legitimacy and local leadership. Run in partnership with India’s Barefoot College, the program trains illiterate and semi-literate rural women to become solar engineers over six months. The pedagogy is entirely experiential: participants learn by doing, wiring circuits, assembling panels, and installing solar systems in real time. There are no textbooks, no exams, just collaborative, hands-on learning designed to build confidence alongside competence.

The results are remarkable. Women who had never set foot in a classroom became the sole providers of electricity in their communities. With their newfound technical expertise, they command respect in village meetings, contribute to infrastructure planning, and influence decision-making processes traditionally dominated by men. This shift aligns with Bourdieu’s (1986) notion of social capital; technical knowledge becomes a gateway to civic authority. Their expertise does not remain confined to the domestic realm; instead, it becomes a bridge to public recognition, status, and influence.

In many villages, these women are now consulted on broader development matters, from electrification needs to energy use at schools and clinics. Their visibility as community problem-solvers elevates them from peripheral domestic roles to central governance actors. This transformation underscores the civic power of skill acquisition: when learning is directly tied to community well-being, technical education becomes a form of political participation.

²<https://www.barefootcollege.org/zanzibars-solar-mamas-flip-the-switch-on-rural-homes-gender-roles-2/>

Yet, like Tostan, the Solar Mamas model faces fragility. Without integration into national rural electrification strategies or institutionalised follow-up, these graduates risk becoming isolated success stories rather than agents of systemic change. Gender backlash is also a genuine concern: women who challenge traditional hierarchies by taking on technical and leadership roles often face resistance from within their communities. As Mbo'o-Tchouawou et al. (2019) note, this necessitates formal recognition, policy support, and safeguarding mechanisms to ensure their continued participation and protection.

What makes the Solar Mamas initiative powerful is not just its delivery of skills, but also its subversion of expectations: who can be an engineer, who gets to speak in public, and who holds authority. The program reframes civic participation not as voting or attending town halls alone, but as contributing essential knowledge to collective life.

Together, Tostan and Solar Mamas demonstrate the plural possibilities of NFE. While Tostan shows how community-wide, dialogic learning can reshape social norms and governance practices, Solar Mamas reveals how individual empowerment through technical competence can evolve into civic influence. Both underscore that NFE's value lies in its rootedness, lived experience, real-world application, and capacity to translate learning into leadership. The challenge for policymakers is not whether to support NFE, but how to scale and embed it without stripping away its contextual strength and participatory soul.

6. Policy Recommendations

To fully harness the transformative potential of NFE as a vehicle for civic engagement and youth participation in governance, African policymakers must move beyond celebratory narratives toward a clear-sighted appraisal of both its strengths and limitations. Evidence demonstrates that NFE cultivates agency, efficacy, and cross-cultural competence in ways that formal schooling often cannot. However, it also exposes enduring challenges of fragmentation, inequity, and weak institutional linkages. A forward-looking policy agenda must therefore focus on embedding NFE within systems, expanding access, assuring quality, and securing sustainable financing.

6.1. Systemic Integration and Policy Anchoring

The first policy priority is to integrate NFE into national education and governance frameworks without compromising its autonomy or flexibility. Too often, policymakers treat NFE as peripheral: an informal, remedial space detached from mainstream policy. Integration should proceed through recognition and policy frameworks that validate non-formal learning, such as UNESCO's *Guidelines for the Recognition, Validation and Accreditation of the Outcomes of Non-Formal and Informal Learning (RVA)* (UNESCO Institute for Lifelong Learning, 2012) and conceptual models of non-formal–formal education reform (Hoppers, 2006). At the continental level, African states can align these reforms with the Continental Education Strategy for Africa 2016–2025 (African Union Commission, 2016).

Policymakers must pursue a dual strategy: embedding NFE structurally in education and civic policy while safeguarding its pedagogical distinctiveness. This means linking NFE outcomes to national qualification frameworks and Recognition of Prior Learning (RPL) systems while preserving participatory and experiential methods. Experiential methods emphasise learning through direct experience (such as dialogue, community projects, role-play, and reflection rather than passive instruction or rote memorisation). Integration should strengthen coordination and legitimacy, rather than bureaucratizing innovation.

6.2. Equity and Access

Access to NFE remains stratified by geography, gender, class, and disability. Urban, educated youth dominate participation, while rural and marginalised groups face barriers of cost, transport, and technology. Programmes like *Solar Mamas* demonstrate how NFE can disrupt gender hierarchies, yet such examples are still exceptions.

Governments should therefore adopt equity safeguards: targeted subsidies, inclusive curriculum design, outreach through trusted community intermediaries, and culturally grounded delivery mechanisms. Addressing cultural barriers is equally vital. Gerontocratic norms that marginalise youth and gender norms that restrict women's leadership must be confronted through mentorship initiatives, intergenerational dialogues, and media campaigns that normalise youth and women's participation in governance.

Technology offers promise but demands caution. Digital platforms, radio, and mobile learning can expand reach, yet also risk deepening inequality if they privilege literate, urban users. Policymakers should treat technology as a complement rather than a replacement, investing in multilingual content, accessible infrastructure, and inclusive design that accommodates learners with disabilities.

6.3. Validation and Quality Assurance

Limited recognition of NFE outcomes remains a significant constraint. Graduates of programmes such as PACEMaker International, Jumpstart Academy, or the Duke of Edinburgh's International Award often develop leadership and problem-solving skills; however, they frequently lack credentials that translate into labour-market or governance opportunities. Policymakers should therefore institutionalise competence-based assessment and validation frameworks that move beyond symbolic certification.

To guarantee quality while preserving adaptability, governments should invest in facilitator development and standardised, evidence-based monitoring. South Africa's National Qualifications Framework and Kenya's RPL Policy provide working models for embedding NFE into national systems. The Duke of Edinburgh's International Award also illustrates how structured, tiered certification (when coupled with reflection and external verification) can formalise learning without diluting its participatory ethos.

6.4. Sustainable Financing and Political Ownership

Chronic underfunding remains the most intractable barrier to progress. NFE often relies on short donor cycles, which undermines continuity and scalability. Governments must establish dedicated budget lines for NFE within the education, youth, and governance ministries. In addition, organisations and governments should explore innovative financing models (such as social-impact bonds, diaspora contributions, and public-private partnerships) to diversify funding sources.

Crucially, NFE must enjoy political ownership rather than remaining an NGO-driven space. The most durable initiatives, such as Tostan and the Duke of Edinburgh's International Award, thrive because they are co-designed with communities and supported by robust policy frameworks. Governments should fund community-based organisations sustainably, while also embedding safeguards for transparency and accountability.

Finally, young people themselves must shape NFE policy and evaluation processes. Institutionalising youth advisory boards and feedback mechanisms within ministries and

education councils ensures that programmes remain responsive to learners' realities. Without this participatory governance loop, NFE risks reproducing the very top-down tendencies it seeks to counter.

7. Conclusion

Across Africa, a new generation of youth stands ready to lead, yet remains underserved by education systems that continue to privilege examination performance over civic competence. As the African Union takes a permanent seat at the G20 and African leaders assume more visible roles in global governance, preparing young Africans for these responsibilities has become a crucial policy imperative.

This essay has argued that NFE offers a timely and transformative pathway. By embedding leadership, civic consciousness, and practical engagement into its pedagogy, NFE equips young Africans not only to participate in community life but also to represent their societies in global arenas, including climate negotiations, SDG monitoring, AU Youth Assemblies, and G20 engagement tracks.

What is required now is not rhetorical 'forward-thinking' but a decisive policy reorientation—one that anticipates future governance challenges related to climate, technology, and migration and ensures that today's educational investments prepare youth to meet them. This reorientation does not suggest replacing formal schooling with NFE; instead, it calls for an alternative model in which formal and non-formal education operate in tandem. NFE should be recognised as a flexible, experiential counterpart that strengthens, rather than competes with, formal systems. Service-learning, community projects, and Recognition of Prior Learning (RPL) illustrate how both domains can function as mutually reinforcing pillars within a broader civic learning ecosystem.

The comparative evidence in Section 6 underscores NFE's greatest strength: its *context-specific adaptability*. In community-based settings like *Tostan*, NFE fosters collective empowerment by reshaping social norms and embedding democratic deliberation. In technology-focused programs like *Solar Mamas*, it cultivates individual agency and civic legitimacy by developing practical skills. Together, these examples reveal that NFE's value lies not in uniformity but in its diversity, its capacity to generate civic competence through non-linear, experience-driven learning that responds to local realities.

Investing in NFE is not a diversion from urgent development priorities; it is an essential tool in advancing good governance. By building political literacy, negotiation skills, and civic agency, NFE reduces the long-term costs of disengagement, instability, and democratic backsliding. Policymakers should therefore prioritise models that reach marginalised populations, embed structured reflection, and demonstrate evidence of behavioural, not merely attitudinal, change.

At its core, NFE is about cultivating civic imagination and democratic resilience. Through storytelling, service, and community-rooted learning, it nurtures agency and embeds political literacy, the competencies most essential to democratic life. As the African Union's *Agenda 2063* envisions "an Africa driven by its citizens, especially its youth," NFE provides the most direct means of realising that vision.

Africa's influence in global governance will not rest on demographics but on preparedness. By embedding NFE within national education architectures, financing it sustainably, credentialing its outcomes, and, most importantly, involving youth in its design, governments can ensure that African youth enter multilateral spaces not as guests but as partners, contributors, and visionaries. NFE's flexible, inclusive, and transformative character equips them not only to inherit the future but also to govern it.

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**Old Ghost, New Shadows: Resource Curse Dynamics and the Growing
Illicit Flows in Africa's Carbon Market****Ololade Mustafa Aremu**

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Abstract: This essay explores the emerging threat of illicit financial flows (IFFs) within Africa's expanding carbon market, drawing parallels to the historical "resource curse" seen in mining and oil. It illuminates how fraudulent project baselines, inflated offsets, and opaque shell companies allow foreign and domestic actors to exploit the continent's environmental assets for illicit gain. The essay adopts Polanyi's theory of fictitious commodities and Akerlof's information asymmetry to explain how market failures and a lack of transparency enable "carbon colonialism" and corruption. Detailed case studies from Zimbabwe, Kenya, and Liberia illustrate the socioeconomic harms caused, including land-grabbing and the displacement of local communities. To combat these systemic vulnerabilities, the author proposes a multi-level policy framework involving international oversight, blockchain-enabled registries, and robust community-led benefit-sharing. Finally, the essay advocates for structural reforms and regional cooperation to ensure Africa's climate finance contributes to genuine ecological sustainability rather than further financial exploitation.

Keywords:

1. Africa
2. Carbon Market
3. Climate Finance
4. Illicit Flows
5. Resource curse

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1. Introduction**1.1. Africa and IFFs Risk in the Carbon Market**

In contemporary times, the shift toward the carbon market as a mitigating mechanism to climate change has raised several risks of illicit financial flows (IFFs). Some analysts project a significant expansion of the market, with annual investment between USD 7 billion and 35 billion

by 2030 and between USD 45 billion and 250 billion by 2050.¹ Yet, this anticipated growth sits uneasily alongside persistent structural vulnerabilities, as IFFs, together with other pre-existing challenges, have been identified as a threat to achieving a just energy transition (OECD 2023, p. 9). Transparency International (2024) indicates corruption, undue influence, and dirty money as the biggest challenges facing climate change mitigation.² In the same reports, Sub-Saharan Africa scores lowest (33/100), with 90% of its countries scoring below 50.³ Clearly, as an established carbon trader in the Global South, Africa sits at the centre of this quagmire. Attracted by its vast forest resources, under-industrialized economies, and perceived low-cost mitigation opportunities, the continent has become a frontier in global climate finance amid mounting pressure from countries in the Global North to meet net-zero targets (CPI 2024, p. 26). In addition to holding 30% of the world's mineral resources, the continent also has enormous potential for carbon sequestration, with an estimated USD 100 billion in carbon credits available each year by 2050.⁴ However, there have been legitimate concerns about new and poorly understood channels for IFFs, corporate greenwashing, and environmental exploitation (Sasaki 2025, p. 12), after investigations into carbon offset projects in Kenya and Uganda found discrepancies in emissions accounting and questionable benefit claims (Policy Brief 2025, p. 10). This vulnerability is further amplified, considering the continent loses about half (USD 40 billion)⁵ of its total IFFs (USD 88.6 billion)⁶ to the extractive sector, such as forestry, agriculture, oil, and minerals, where carbon sequestration projects are usually executed.

Against this backdrop, the present essay examines the extent and magnitude of IFFs' risk to the carbon trade in Africa. In advancing its discourse, the essay adopts Polanyi's (1944) theory of "fictitious commodities,"⁷ which frames assets, including carbon credits, as abstract and artificially constructed, prone to speculative manipulation, and Akerlof's (1970) "information asymmetry" theory,⁸ which explains how markets, including carbon markets, fail when buyers and regulators cannot reliably distinguish between genuine and inflated products. Given the absence of scholarly research exploring IFFs, the carbon market, and the African continent, this essay, drawing on the aforementioned theories, demonstrates that this nascent "carbon rush"

¹ Frozen Carbon Credit Market May Thaw as 2030 Gets Closer, 2025. <https://www.msci.com/research-and-insights/blog-post/frozen-carbon-credit-market-may-thaw-as-2030-gets-closer>

These projections include both the voluntary carbon market (VCM) and the Compliance Carbon Market (CCM).

² <https://www.transparency.org/en/cpi/2024>, Retrieved August 28, 2025

³ <https://www.transparency.org/en/news/cpi-2024-sub-saharan-africa-weak-anti-corruption-measures-undermine-climate-action> Retrieved August 28, 2025

⁴ Africa's development and climate needs are huge. Retrieved August 24, 2025 <https://mo.ibrahim.foundation/our-research/data-stories/financing-africa>

⁵ Africa loses \$40 billion annually to illicit financial flows in the extractive sector — UN ECA. Retrieved August 24, 2025 <https://nairametrics.com/2025/06/06/africa-loses-40-billion-annually-to-illicit-financial-flows-in-extractive-sector-un-eca/>

⁶ Africa's public services face a more significant threat than corruption: the unchecked outflow of resources by multinationals. Retrieved August 24, 2025 <https://globaltaxjustice.org/news/africas-public-services-face-a-more-significant-threat-than-corruption-the-unchecked-outflow-of-resources-by-multinationals/>

⁷ Polanyi argued that labour, land, and money are *fictitious commodities* because they were not originally meant to be bought or sold but were commodified artificially through social and political processes. The concept originates from his book "The Great Transformation", referring to labour, land, and money, which are treated as though they were originally meant to be produced for sale on a market (like a typical good does) but weren't. According to him, this has led to socio-ecological destruction because they are cardinal to life and nature, not mere products. He argued that commodifying these elements disrupts society, giving rise to protective counter-movements (the "double movement") to re-embed the economy in social relations.

⁸ Akerlof highlights the risk of "markets for lemons" in which buyers cannot distinguish between real and inflated credits because of limited transparency. Sellers exploit this asymmetry to overestimate volumes and launder illicit finance.

risks repeating similar resource-curse patterns seen in oil, mining, and agriculture. This essay conceptualizes the carbon market as a new frontier for IFFs and foregrounds African agency in mitigating this ugly trend.

1.2. Structure of the Work

This essay proceeds as follows: first, it introduces the evolution of global carbon markets and Africa's strategic positioning, tracing the institutional trajectory from the Kyoto Protocol to more recent frameworks such as the African Carbon Markets Initiative (ACMI). Next, the essay shifts to a conceptual analysis of IFFs, coining the term "illicit carbon trading" (ICT) as an emerging IFF variant. Furthermore, the essay provides a detailed analysis of the mechanisms and typologies of ICT, by interrogating practices such as overinflated or "phantom" credits, systemic misreporting, shell entities, and the so-called carbon cowboys. It further disaggregates the constellation of actors involved: from state authorities and multinational corporations to transnational criminal and mafia-styled networks. Subsequently, the essay approximates the scale of ICT by triangulating historical patterns from extractive sectors with country-level analysis of emerging carbon frontiers: Zimbabwe, Kenya, Liberia, South Africa, and Tanzania. The essay then examines the consequences of these illicit dynamics and structural and systemic factors. Finally, the essay advances policy recommendations and implementation pathways for international institutions, national governments, and private actors.

2. The Rise of Carbon Markets and Africa's Strategic Position

2.1. The Genesis: Global Round Table

In 1997, the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Kyoto Protocol, which recognized the benefits of using market-based mechanisms to combat climate change. With the Protocol, the concept of emissions trading and carbon credits came onto the global scene as tools to help countries realize their greenhouse gas (GHG) reduction commitments cost-effectively, primarily on carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).⁹ By buying "units" equivalent to one tonne of CO₂ (with other GHG emissions converted to CO₂), carbon trading allowed nations to offset a portion of their emissions (World Bank 2021, p. 69). This ushered in a new commodity of emission reductions or removals and established the basis for *carbon markets*, where each tradeable unit is known as a "carbon credit". However, the 2015 Paris Agreement introduced cooperative approaches under Article 6,¹⁰ laying the foundation for a globally linked system in which emissions reductions could be traded as commodified units.

Broadly, the carbon market is categorized into two components: the compliance carbon market (CCM) and the voluntary carbon market (VCM). The CCM involves the trading of carbon credits and the offsetting of carbon emissions by countries or intergovernmental bodies that are legally bound to comply with the emission targets set by the Kyoto Protocol (World Bank 2018, p. 14). The European Union Emissions Trading System (EU ETS) is the largest of the CCM operations, raising cumulatively over €175 billion since 2013 from the sale of allowances.¹¹ The VCM, on the other hand, allows private citizens or institutions (without government or regulatory oversight) to offset their GHG emissions by trading carbon credits (Ajayi et al. 2025)

⁹ Emissions Trading. Retrieved August 24, 2025, <https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading>

¹⁰ Article 6 of the Paris Agreement. Retrieved August 24, 2025 <https://unfccc.int/process-and-meetings/the-paris-agreement/article6>

¹¹ About the EU ETS. Retrieved August 24, 2025 https://climate.ec.europa.eu/eu-action/carbon-markets/about-eu-ets_en

Common in this category are voluntary efforts to offset emissions from the production of goods, air travel, and carbon footprints of conferences or other public events (Jäckle 2022, pp. 19-53). In 2024, the global market size was pegged at USD 4.04 billion, with a projection of 23.99 billion by 2030.¹²

2.2. Africa's Positioning in the Global Order

In the fast-rising global carbon market, Africa has positioned itself not as a buyer but as a seller. This is noteworthy, given that the continent contributes only 4% of greenhouse gas emissions.¹³ Thus, it is a *ready-made* market for carbon sequestration to high-emission corporations and affluent countries. As an instance, the world's greatest carbon sink is the Congo Basin, which spans eight African nations (World Economic Forum 2022).

Engagements on the continent with VCM date back to the late 1990s. One of the prominent ones was the Kasigau Forest Conservation Project in Kenya. Initiated in 1998 by Wildlife Works, it became East Africa's first carbon offset scheme and the first "Reducing Emissions from Deforestation and Forest Degradation" (REDD+) project in the world to achieve Verified Carbon Standard Certification.¹⁴ The project's achievements encouraged similar ventures such as the Mikoko Pamoja initiative in Southern Kenya, which garnered annual offsets from 117 hectares of mangroves, reinvesting proceeds into clean water access, school materials, and ecotourism.¹⁵

More recently, African countries have increased their engagement with VCM. A major milestone came at COP27 with the launch of the African Carbon Markets Initiative (ACMI), which aimed to scale the continent's VCM participation to generate 30 million jobs by 2030.¹⁶ Subsequently, several states, including Liberia, Zambia, and Tanzania, have signed large-scale concession agreements for carbon credit projects, covering millions of hectares for activities such as reforestation and deforestation prevention. Tanzania alone attracted over USD 20 billion in pledges from global investors (BBC 2023). Other commitments include USAID's USD 1.4 million support for Kenya towards market development and regulatory reforms, and the UAE Carbon Alliance's USD 450 million pledge on African credits by 2030.¹⁷

Persistent shortfalls in climate finance partly drive this momentum. Despite achieving the USD 100 billion annual pledge to developing countries before 2025 (OECD 2022), Africa, which needs an estimated USD 6 trillion by 2030 to meet half of its climate targets,¹⁸ faces debt burdens and insufficient international support. In response, countries are turning to innovative solutions. In this regard, Morocco's soil sequestration programs, a collaboration between the OCP Group and the American start-up Regrow, enhanced soil health and provided farmers with

¹² Voluntary Carbon Credit Market Summary. Retrieved August 24, 2025,

<https://www.grandviewresearch.com/industry-analysis/voluntary-carbon-credit-market-report>

¹³ How much does Africa contribute to global carbon emissions? Retrieved February 5, 2026

<https://www.aljazeera.com/news/2023/9/4/how-much-does-africa-contribute-to-global-carbon-emissions>

¹⁴ <https://wildlifefriendly.org/wildlife-works-first-wildlife-friendly-certified-carbon-offsets/> (Retrieved August 24, 2025)

'REDD' stands for 'Reducing emissions from deforestation and forest degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely, sustainable management of forests and the conservation and enhancement of forest carbon stocks. <https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd>

¹⁵ Kenyan Coastal Villagers earning a living from selling Carbon Credits. <https://www.un.org/pt/Nairobi-unic/story3>

¹⁶ Nigeria, others launch new Africa carbon markets initiative at COP 27. <https://guardian.ng/news/nigeria-others-launch-new-africa-carbon-markets-initiative-at-cop-27/>

¹⁷ UAE Carbon Alliance Joins Africa Carbon Market Initiative's Advance Market Signal to Purchase US\$450 million of High-quality African Carbon Credits by 2030. <https://energyalliance.org/uae-carbon-alliance-joins-acmi-advance-market-signal/>

¹⁸ <https://unfccc.int/topics/climate-finance/workstreams/needs-report>

revenue through carbon credits.¹⁹ At COP30, the climate finance pledge was tripled from USD 100 billion to USD 300 billion for developing countries by 2035.²⁰ Still, there remains an annual estimated adaptation finance shortfall of tens of billions of dollars, and a projected USD 2.5 trillion deficit for Africa by 2030.²¹

3. Africa's Carbon Credit Trade and IFFs: Spotting the Dark Links

As mentioned above, Africa's engagement in the VCM and the launch of ACMI carry profound significance. Besides aiming to support millions of jobs by 2030, the initiative aims to scale the market to 300 million and 1.5 billion carbon credits retired annually by 2030 and 2050, respectively, as well as unlocking revenues, up to USD 6 billion and USD 120 billion over the same period (Power Shift Africa 2023, p. 16). Yet, the scale, speed, and transnational character of these anticipated heights raise critical governance, transparency, and regulatory concerns. A recent survey of companies showed that transparency on the use of revenues was the main obstacle discouraging greater utilisation of carbon credits.²² It is on this basis that the analytical foundation for assessing how illicit financial flows may arise, operate, and proliferate within this emerging climate finance ecosystem is established.

3.1. Conceptual overview of IFFs within Africa's Carbon Market

UNODC and UNCTAD (2020) stated that IFFs are multi-dimensional, spanning activities that include: flows originating from illicit activities, illicit transactions to transfer funds that have a licit origin, and flows stemming from licit activity being used illicitly. The figure below maps Africa's carbon trading against this UNODC-UNCTAD tripartite framework. Though some overlap with categories 1 and 2, the bulk of IFFs in Africa's carbon markets arises from licit activities (the market itself) being turned illicit via overinflated offsets, misreporting, shell companies, etc.

Notably, these numbers are illustrative rather than precise values, depicting a conceptual hierarchy of dominance. On a scale of 1.0, the navy blue bar is at 0.9, but the others are at 0.3 and 0.1, respectively. This illustrates that Africa's carbon trading is not inherently illicit; instead, it becomes so through the methods by which lawful activities are exploited for financial gain. This is consistent with the joint UNODC-UNCTAD (2020, pp. 7-9) study, which reveals that the complexity of IFFs has led to the creation of conceptual frameworks and pilot methodologies rather than to definitive sector-specific metrics. Hence, this definition gap is not unique to this study but is characteristic of the field more generally. A horizontal bar chart was selected as the output format, whose bar lengths easily convey the hierarchy and dominance of one category over the others.

¹⁹ OCP, UM6P et Regrow sign a partnership to develop an MRV system. <https://www.ocpgroup.ma/press-release-article/ocp-um6p-et-regrow-sign-partnership-develop-mrv-system>

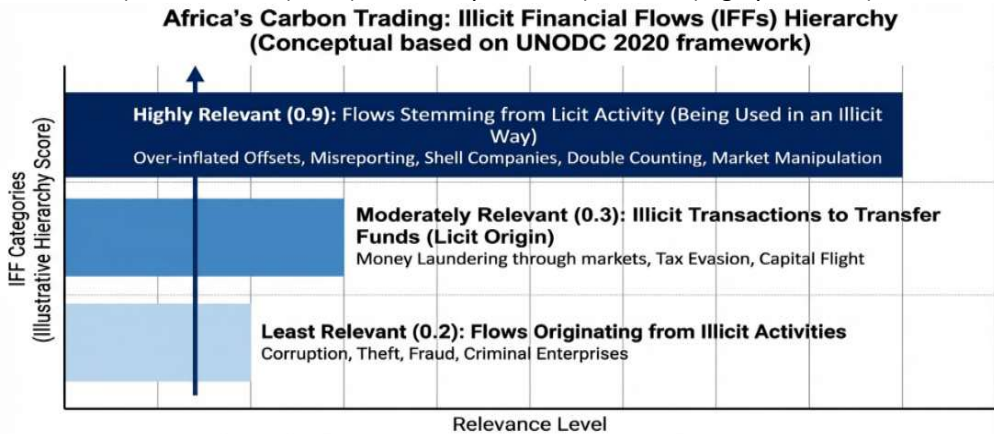
²⁰ <https://www.ecofinagency.com/news-industry/1211-50371-cop30-africas-climate-cost-and-finance-exclusion>

Note that, considering inflation over the 2020 to 2035 period (15-year period), the amount does not even represent a doubling: at a 3% inflation rate, USD 300 billion in 2035 is equivalent to USD 193 billion in 2020.

²¹ <https://africanclimatewire.org/2025/11/a-trillion-dollar-promise-on-a-warming-planet-can-cop30s-finance-deliver-for-africa/>

²² Conservation International & We Mean Business Coalition (2023) In race to reach net zero, businesses look to carbon credits, survey finds | Conservation International

Figure 1. A conceptual hierarchy of IFFs in Africa’s Carbon Trade: 0.2 (Least Relevant), 0.3 (Moderately Relevant), and 0.9 (Highly Relevant).



Source: Author’s Conceptualisation on a 1.0 Scale

3.2. Emergence of Illicit Carbon Trading (ICT)

Drawing on the above exposition, Evans-Ibe (2023, p. 3) highlighted four indices – geographical coverage, mode of earning, mode of transfer, and usage of proceeds – that characterize IFFs. Relying on his work, this essay examines African trade in the global carbon market as a new frontier of IFFs.

3.2.1. Geographical Coverage: Essentially, IFFs involve movement of funds across borders, often through opaque channels. Africa’s carbon credit trading operates within a global value chain mostly dominated by buyers and brokers from the developed world in Europe, North America, and Asia. Fewer than 28% of companies involved in carbon sequestration projects in Africa are actually based in Africa.²³ A prime example of this trend can be seen with Tanzania VCM, where over 20 companies from diverse countries such as the United States, Canada, Switzerland, Russia, Italy, Singapore, Estonia, Kenya, and the UAE have invested over USD 20 billion towards carbon offset credits.²⁴

3.2.2. Mode of Earning: The funds involved in IFFs may be obtained through either legitimate or illegitimate means. Since the sale of carbon credits is in itself legal, fraudulent project baselines, inflated carbon savings, and “phantom credits” can generate *revenue* under false pretences. A report by The Guardian found that more than 90% of rainforest carbon offsets certified by Verra (the world’s leading carbon standard setter for VCM) do not represent *genuine* carbon reductions.²⁵ Multiple African carbon projects have come under investigation for allegedly claiming emission reductions between 5 and 30 times more than they had actually achieved. Among the accused is the Kariba carbon megaproject in Zimbabwe—although

²³ Carbon Credits in the Congo: The Cost of Capture, Part 1 <https://pulitzercenter.org/stories/carbon-credits-congo-cost-capture-part-1>
²⁴ Tanzania Carbon Credit Projects Attract \$20B from Companies. <https://carboncredits.com/tanzania-carbon-credit-projects-attract-20b-from-companies/>
²⁵ Revealed: more than 90% of rainforest carbon offsets by the biggest certifier are worthless, analysis shows. <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

strongly denied by its developer (SouthPole).²⁶ Such potential misrepresentations, nonetheless, put carbon credit revenues, though obtained via market mechanisms within IFF's risk. As shown by Mikoko Pamoja (a mangrove conservation and restoration initiative in Gazi Bay, Kenya), rigorous accounting involving the community in project design and a thorough auditing and verification process can preserve the legitimacy of carbon revenues (Flint, Herr, and Smith 2018, pp. 10-15).²⁷

3.2.3. Mode of Transfer: IFFs involve the illegal or deceptive transfer of funds. Payment in African carbon trading is often through multi-jurisdictional chains of secretive intermediaries, including private brokers, carbon exchanges, online resellers, cryptocurrency platforms, certifiers, consultancies, and financial firms (Carbon Market Watch 2023, p. 7). This routing obscures the final beneficiaries and can bypass domestic reporting requirements (Camacho 2024, p. 11). Kariba project founder Wentzel devised an untraceable way to move money, which he claimed “*was illegal...but it got looked over*”.²⁸ Power Shift Africa (2023, p. 29) captured succinctly in the following description of intermediary behaviour in carbon markets:

As intermediaries perform different functions, they also earn money in different ways while taking on much less risk than the actual project owners. Some intermediaries charge a fee for merely connecting buyers and sellers. Others charge an annual fee to sellers for seeking buyers and negotiating a credit price. Yet others buy credits directly and earn money...marking up the price of that credit and then deducting processing fees from the sales price when reselling it (or adding the fees on top of the price) ...The same credit can then be traded between brokers an ‘infinite’ number of times before it is sold to its final end-user, the offsetting company...The end-users, in turn, are seeking cheap and abundant carbon credits and have little incentive – beyond the reputational damage of purchasing false or faulty credits – to ensure the credits actually reduce emissions and deliver sustainable development benefits.

Consequently, fees are added to existing fees that project owners have to pay to the standards for registration and issuance, as well as to the verification and validation bodies. Intermediaries invoke the concept of “confidentiality” in keeping data out of the public eye (Carbon Market Watch 2023, p. 12). Hence, there is very little transparency about the amount of money that actually reaches the mitigation activity.²⁹

3.2.4. Usage: Funds may also be classified as IFFs on account of how they are employed. There is no established evidence linking African carbon credits to criminal enterprises. However, a

²⁶ South Pole ends agreements with Carbon Green Investments (CGI), owner of the Kariba REDD+ project. <https://www.southpole.com/news/statement-27october>

²⁷ The project has been a huge success because of site-specific elements, the community's involvement in the design process, and the close relationship between the project developers and the community; the community directly benefits from the sale of mangrove carbon credits. Important takeaways from this case study include the necessity to: examine project revenues and expenses more methodically and thoroughly, and determine whether the revenue truly has the desired positive effects.

²⁸ <https://reddmonitor.substack.com/p/i-probably-will-go-to-jail-says-steve> Retrieved August 28, 2025

²⁹ Analysis of Voluntary Carbon Market Stakeholders and Intermediaries, Allied Offsets 1 February 2023. <https://carbonmarketwatch.org/wp-content/uploads/2023/02/Stakeholder-Analysis-for-the-Voluntary-Carbon-Market.pdf>

widely shared criticism of the continent's carbon market is the neglect of local communities and the absence of value addition to indigenous people.³⁰

3.2.5. Horizontal and Vertical Flows: In addition to the aforementioned four indices, this essay adopts a fifth component. Horizontal flows, in this context, refer to illicit activities facilitated by African actors (governments, agencies, community organisations, and local brokers/companies) to transfer funds. Conversely, vertical flows trickle down from buyers and intermediaries, mostly from the Global North. As the former could lead to the latter, the latter may not necessarily flow from the former. For instance, in the 2025 Kenya court's decision, the alleged inflated baselines on which the suit was instituted were traced solely to the corporations buying the carbon credits.³¹

4. Mechanisms and Typologies of ICT

The foregoing analysis demonstrates that carbon credits are rarely illicit *per se* but are rendered so through specific modes of project design, certification, valuation, and financial transfer. This reflects a deeper structural problem in which carbon (an inherently socio-ecological function) is commodified without the necessary institutional and informational safeguards to discipline behaviour. Consequently, recurring mechanisms and patterned behaviours emerge, constituting discernible typologies of ICT across African jurisdictions and reinforced by global precedents.

4.1. False Carbon Trading and Overinflated Offsets: Through inaccurate disclosure on the need and use of carbon credits, often based on unverifiable assumptions, outdated baselines, or additionality³² claims, buyers, and/or brokers have questionably legitimized the ongoing harmful practices of ICT. According to Behn (2011, p. 13), "the potential for over-estimation of emissions in the EU ETS is substantial". As portrayed by the investigative report of Barratt and Sandler Clarke (2022), many carbon offset payments do not go to conservation projects, but rather to brokers who sell them at inflated prices, reflecting Akerlof's adverse selection: when quality cannot be credibly signalled, fraudulent or low-integrity credits drive market outcomes.

A case in point was the Kariba REDD+ project in Zimbabwe. In October 2023, it was found that South Pole (a US-intermediary company) had profited millions of dollars from trading offsets by "overestimating" their climate benefits, buying them for as little as €0.50 and selling them for more than €20. It was also found that most of the project's proceeds had gone to the two partners of the local project implementer, Carbon Green Investments (CGI), rather than to people in the communities combating deforestation (Cooksey 2024, p. 6).

4.2. Misreporting: A major flaw in the carbon market, especially as seen in Africa's reforestation projects, is that any estimation of carbon credits depends on an unknowable future; for the estimation usually rests on an imaginary counterfactual. This window for speculation has inspired misreporting – a practice whereby project developers inflate the projected emissions reductions, thereby generating and selling more carbon credits than the underlying

³⁰ Carbon markets: Time to listen to Indigenous Peoples and local communities.

<https://www.recoftc.org/stories/carbon-markets-time-listen-indigenous-peoples-and-local-communities>

³¹ Osman & 164 others (Suing on Their Behalf and Behalf of Residents of Merti Sub-County, Chari, and Cherab Wards in Isiolo County) v Northern Rangelands Trust & 8 others (Petition E006 of 2021) [2025] KEELC 99 (KLR) (24 January 2025)

³² A carbon project is additional if the emissions reductions or removals would not have occurred without revenue from the sale of carbon credits.

environmental performance can legitimately warrant (Loffler and Anubhav 2025, p. 13). As a result, the carbon credit market has been closely associated with repeated scandals and corruption.³³ A striking illustration comes from Liberia's first carbon deal with Carbon Harvesting Corporation (CHC), a UK-based carbon trading firm.³⁴ The country's government investigations revealed that project documents had been manipulated through plagiarism and inflated projections. By copying a US Forest Service Study and misrepresenting the expected carbon sequestration potential, CHC presented an exaggerated cost-benefit profile, thereby manufacturing artificial credit volumes and misleading both regulators and communities. This case illustrates that asymmetric information enables private actors to extract rents from Africa's carbon credit trading.

4.3. Shell Companies & Carbon Laundering: According to INTERPOL (2013, p. 14), this practice is made easier “by the fact that there is no physical indication of the identity of the person who holds the carbon rights, beyond a piece of paper or record in a government register.” The same applies to the purpose for which a buyer retires a carbon credit – whether it is toward a carbon neutrality claim in a given year, for a specific product or brand, or for some other purpose (Carbon Market Watch 2022). With no apparent legitimate business activities or purpose, shell companies purchase carbon credits to introduce illicit proceeds into the financial system, with subsequent trades used to hide the illegal source (Chan et al., 2023, p. 15). This was evident in Kenya's 2025 landmark ruling, where the evidence gathered showed that the two conservancies in the Northern Rangeland Trust (NRT) lacked a clear legal basis and therefore could not ‘own’ or ‘transfer’ carbon credits to the NRT. The court held that the Western donors (USAID, EU, and France) must stop funding, as they had been funding an illegally established organisation.³⁵

4.4. Cowboys: Another recurrent mechanism involves the deployment of concealed or surrogate actors who front for the true beneficiaries of the fraudulently designed carbon project. Often, these “cowboys” are nominal representatives used to secure government approvals, negotiate contracts, and create a façade of legitimacy, when the real owners or financiers remain hidden. Due to information asymmetry, this mechanism enables elite capture by obscuring accountability, facilitating rent-seeking, and disguising the origins of financial gains.

A classic example of a “ghost” implementer/cowboy was Liberia's first carbon deal, where Michael Foster, the actual owner of CHC, was largely unknown to Liberian authorities. Instead, he used the services of George Antwi, a Ghanaian associate, who acted as the visible broker to establish CHC's operation in Liberia. The country would have lost over USD 2 billion had Foster not been arrested by the UK police.³⁶

³³ Laundering Carbon—The Gulf's ‘New Scramble for Africa’. <https://merip.org/2024/07/laundering-carbon-the-gulfs-new-scramble-for-africa/>

³⁴ Global Witness investigation leads to UK arrest over carbon deal in Liberia.

<https://globalwitness.org/en/campaigns/corruption-and-money-laundering/global-witness-investigation-leads-to-uk-arrest-over-carbon-deal-in-liberia/>

³⁵ Kenya: Court halts flagship carbon offset project used by Meta, Netflix and British Airways over unlawfully acquiring community land without consent. <https://www.business-humanrights.org/en/latest-news/kenya-court-halts-flagship-carbon-offset-project-used-by-meta-netflix-british-airways-over-unlawfully-acquiring-public-land-without-community-consent/>

³⁶ *Ibid*, 33

4.5. Carbon VAT Fraud: Both Interpol³⁷ and the IMF³⁸ documented that the global carbon market has been targeted by “missing trader” value-added tax (VAT) scams (otherwise known as Carousel Fraud) because of the intangibility, high value, and ease of transfer of carbon credits. This occurs when fraudsters exploit cross-border VAT rules to purchase credits tax-free in one country, resell them domestically with VAT added, and then vanish without remitting the tax.³⁹ Most infamous was the EU’s saga between 2009 and 2010, which led to an estimated revenue loss of €5 billion to the government.⁴⁰ More specifically, Britain lost about £10 billion from carbon VAT fraud.⁴¹

In Africa, though there are no publicly reported cases of carbon-credit VAT fraud, the risk is real as carbon instruments are increasingly drawn into domestic VAT regimes. From ample interpretive suggestions, professional tax advisors in countries such as Zambia,⁴² Mozambique⁴³, and Congo⁴⁴ indicate carbon credits *could* be VAT-able services when supplied. This rests on the assumption that carbon credits are intangible assets and thus should be recorded as ‘services’ under accounting rules (KPMG 2023). There are potential loopholes for carousel fraud if not backed by concrete preventive measures, especially as the continent adopts ACMI.

4.6. Phishing and Hacking: Africa’s trade in the carbon market is exposed to cyber-enabled IFFs. Interpol’s *Africa Cyber Threat Assessment* warns of rising phishing and ransomware schemes, in which hackers steal, encrypt, and demand payment.⁴⁵ In the carbon market, this mechanism has been used to infiltrate trading platforms, steal login credentials and permits, divert payments, and manipulate credit registries.⁴⁶ Even the Kyoto Protocol, establishing the International Transaction Log (ITL) system and national registries to safeguard the issuance and transfer of carbon credits, has not been immune to cyber vulnerabilities. In 2011, the UNFCC itself acknowledged that several national registries had been compromised through phishing attacks that stole user passwords.⁴⁷ In a notorious case, Spain’s carbon registry was exploited by a group of hackers who siphoned off 350,000 credits valued at about €15 each and later resold some to BP for nearly €89,000.⁴⁸ Today, as many African countries, Kenya, Ghana, Djibouti, Gabon, and Guinea, now have respective national carbon registries, these precedents are instructive.

³⁷ <https://www.interpol.int/content/download/5172/file/Guide%20to%20Carbon%20Trading%20Crime.pdf>

³⁸ <https://www.elibrary.imf.org/view/journals/061/2023/001/article-A001-en.xml> Retrieved August 25, 2025

³⁹ Ibid

⁴⁰ <https://www.theguardian.com/news/article/2024/jun/04/the-warring-conmen-at-the-heart-of-a-5bn-carbon-credit-scam> Retrieved August 25, 2025

⁴¹ <https://www.theguardian.com/business/2010/jan/11/eu-carbon-trading-carousel-fraud>

⁴² Ernest & Young (2023) ‘Establishing a robust carbon credits market is crucial to reducing carbon emissions in Zambia.’ <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-zm/documents/ey-carbon-credits.pdf>

⁴³ Ana & Joana (2023) ‘Tolerable Taxation for a Tolerable Planet: How to Tax Carbon Credits Generated in Connection with Petroleum E&P Activities in Africa?’ *International Energy Law Review*, 2. https://www.mirandalawfirm.com/documents/2023_ielr_issue_2_print_pinto_moura.pdf

⁴⁴ Ibid

⁴⁵ INTERPOL Africa Cyberthreat Assessment Report 2025, 4th Edition, May.

https://www.interpol.int/en/content/download/23094/file/Cybercrime_Africa%20Cyberthreat%20Assessment%20Report_Design_FINAL.pdf

⁴⁶ INTERPOL (2013) ‘Guide to Carbon Trading Crime’.

<https://www.interpol.int/content/download/5172/file/Guide%20to%20Carbon%20Trading%20Crime.pdf>

⁴⁷ <https://www.theguardian.com/environment/2015/dec/03/paris-climate-summit-hackers-leak-login-details-of-more-than-1000-officials>

⁴⁸ Black Dragon: UK hacker comes clean on carbon credit thefts. <https://www.reuters.com/article/technology/black-dragon-uk-hacker-comes-clean-on-carbon-credit-thefts-idUSKBN0EV1EB/>

5. Actors: who are involved?

Building on the above mechanisms, this section identifies the principal actors implicated in ICT by adopting the Global Organized Crime Index, which classifies criminal participation across illicit markets. This essay maintains that they emerge within a market architecture characterized by commodification, social embedding, and persistent information asymmetries. To this end, carbon credits—abstract, intangible, and difficult to verify—invite capture by actors positioned to exploit regulatory loopholes, institutional weakness, and epistemic obscurity.

As observed in this section, this constellation of actors is related to the multiplicity of intermediaries operative in the market. One report estimates that, back in 2007, there were at least 60 intermediaries in the VCM, and that there has been a consolidation of actors in recent times.⁴⁹ In the United States, at least 239 intermediaries are registered on its two main VCM programmes (Carbon Market Watch 2023, p. 9). However, not all intermediaries are equal, with a range of sizes, operating ethos, commitment to climate action, and financial profiteering.

5.1. State Actors: These are criminal actors embedded and acting from within the state's apparatus.⁵⁰ Under this category are individuals holding positions in government and its agencies, the military, civil service, and public parastatals who influence or facilitate illicit activities within the African carbon market. Liberia's case is a classic example.⁵¹ Following the CHC scandal, an investigation committee set up by the President revealed that senior officials across multiple institutions colluded in the fraudulent concession. Senator Jonathan Banney of Rivercess County was cited for facilitating the fraudulent deal. Former Minister of Internal Affairs, Ambulai Johnson, was referred to the Ministry of Justice for investigation. Within the country's Forestry Development Authority (FDA), Augustine B.M. Johnson, then GIS Manager, emerged as the principal architect. He was dismissed and prosecuted alongside FDA Technical Advisor Joseph Neufville, for accepting bribes, forging documents, and manipulating biomass studies to legitimize the concession. FDA Managing Director John Woods and Legal Officer Benedict Sorgbeh were formally reprimanded for negligence in authorizing fraudulent paperwork. Hence, this constellation of actors demonstrates how state institutions can become central facilitators of IFFs in carbon markets.

5.2. Foreign Actors: In this category are state and/or non-state criminal actors operating outside their home country.⁵² Here, it refers to foreign nationals, states, and organisations that parade themselves as harbinger of illicit activities through buying credits, implementing projects, and lobbying with state actors. The recent Isiolo court ruling against the Northern Rangelands Trust (NRT) in Kenya's carbon trading is instructive. Upstream, NRT, whose establishment was later declared unconstitutional for lack of community consent, was bankrolled by international donors, USAID, the E.U, France, Denmark, and some 46 others. Downstream, corporations like Meta, Netflix, British Airways, and other multinationals were the purchasers of the carbon sink project. The illegality of the NRT's operations undermines the carbon project's credibility and classifies their revenues as illicit flows into global markets.⁵³

⁴⁹ Ecosystem Marketplace (2019): <https://www.forest-trends.org/wp-content/uploads/2019/12/SOVCM2019.pdf> p.2

⁵⁰ https://ocindex.net/crime/state-embedded_actors

⁵¹ *Ibid*, 33

⁵² https://ocindex.net/crime/foreign_actors

⁵³ *Ibid*, 34

5.3. Mafia-Styled Groups: In consolidating illicit activities at all costs, the services of armed militias in the upstream (carbon-sinking sites) have been documented. Several accusations were made against the NRT about using armed men to drive away indigenous people in Northern Kenya. Through their activities, these men, called “NRT Rangers,” allegedly exacerbated interethnic tensions, keeping herders off long-held traditional grazing areas. The court found no evidence that NRT Rangers were properly registered or supervised under the National Police Reserve framework as claimed by NRT. As critics argue, the term “militarization of conservation” has now entered the jurisprudence of African carbon trading.⁵⁴

5.4. Private Sector Actors: According to Betz et al. (2022), in the carbon market, private actors (not only the ones trading but also the carbon credit verifiers and standards) create a conflict of interest, which could result in fraud, misreporting, overinflation, and embezzlement.⁵⁵ In Liberia’s CHC case, Michael Foster (a British Businessman) operated through his Ghanaian associate to fraudulently secure carbon rights through his front company (CHC). Private entities such as Delta, Gucci, Shell, Disney, ExxonMobil, Nestle, and Volkswagen, among others, have been caught in the scandal of purchasing carbon credits that are “likely junk”.⁵⁶ This status quo is not a result of corporate negligence but of the VCM, particularly of intermediaries in obscuring price signals. In this regard, Carbon Market Watch (2023, p. 6) notes that: “...very few companies publish the price at which they purchase carbon credits. When they do, it is usually impossible to know how many times this credit has been traded by various intermediaries before it was used, and what the markup of each of these intermediaries was. The result is that for virtually all cases where a company pays for a carbon credit, it is impossible to know how much of that money is actually serving climate action as opposed to enriching intermediaries.”

5.5. Criminal Organisations: As opposed to the mafia-actors, criminal organisations in carbon trading do not rely on territorial control; rather, they take advantage of the fragmented structure of carbon markets, where projects are authorized nationally, verified by private actors, and governed transnationally. They operate through complex financial schemes that are difficult to trace, often involving collusion with state officials and private certifiers to legalize fraudulent transactions. A striking case emerged in France, where an organized criminal group comprising 36 people exploited VAT loopholes, having bought carbon credits tax-free abroad, resold them domestically with VAT, and kept the proceeds without paying the state.⁵⁷

6. Estimation of IFFs in Africa’s Carbon Market

Although the continent produces about 13%⁵⁸ of the globe's carbon credits, there are no definitive statistics on IFFs in the African carbon trade due to the market’s nascent and hidden

⁵⁴ *Ibid.* The militarization of conservation refers to the use of military or paramilitary logics, practices, technologies, and personnel in the name of protecting biodiversity and spaces of conservation. This is often referred to as ‘green militarization’. <https://biosec.sites.sheffield.ac.uk/our-research/militarisation-and-conservation>

⁵⁵ In Russia and Ukraine, carbon credits were sold from projects that do not exist or were known not have caused additional carbon reductions. Also, in Slovakia, emission units were traded at half of their market price and allocated to a small firm that turned out to be a shell company, which then sold them at a mark-up. The party of the minister in charge of the transaction had connections with the company. See Camacho (2024, p. 7).

⁵⁶ Corporations invested in carbon offsets that were ‘likely junk’, analysis says.

<https://www.theguardian.com/environment/article/2024/may/30/corporate-carbon-offsets-credits>

⁵⁷ 36 in dock in France's second massive carbon tax fraud trial. <https://www.rfi.fr/en/20180129-carbon-tax-fraud-france>

⁵⁸ Africa’s carbon market dilemma. <https://www.miningreview.com/energy/africas-carbon-market-dilemma/>

nature. Analysis by AlliedOffset (cited in Carbon Market Watch 2023, p. 11) on the two main U.S.-focused VCM programmes (the Climate Action Revenue and America Carbon Registry) found that in terms of market transparency, only a small fraction of data on retirements and transactions is publicly available, making corporate and non-profit offsetting efforts opaque and more difficult to examine. This peculiarity of the carbon market is not anomalous but rather a broader, well-documented challenge in IFFs. As revealed in UNODC and UNCTAD (2020, pp. 11-13) studies, IFFs are deliberately concealed, multidimensional in form, and frequently embedded within otherwise lawful economic activities, rendering precise quantification empirically difficult.

Moreover, existing scholarship understudied the African carbon credit through the lens of integrity risk, accountability gaps, and corruption, dampening the scale of IFFs in empirical records. For this reason, estimation in this essay relies on a triangulated approach: extrapolating from historical IFF patterns in extractive industries and country analysis, benchmarking against illustrative case studies in carbon trading, and drawing on proxy indicators such as price discrepancies, underreporting, and offshore leakages.

6.1. Sectoral Vulnerability and Inferred Risk Pathways

This essay draws on historical IFF patterns in extractive industries, particularly forestry, minerals, and fossil fuels, which currently dominate Africa’s carbon-sinking and offset-generating activities (UNECA 2024). These sectors are extensively documented as major conduits of IFFs, primarily through mechanisms such as illegal logging, profit shifting, trade mispricing, and illicit resource extraction. The structural continuity between extractive governance failures and these historical patterns gives a credible baseline for assessing carbon market vulnerability.

Table 1 presents a sectoral overview of pre-carbon IFFs in Africa’s extractive sectors, which now serve as primary sites for generating carbon credits. The figures are not presented as direct estimates of carbon-related IFFs, but as indicators of institutional vulnerability and risk transfer. Forestry-related losses associated with illegal logging and wildlife trafficking suggest heightened exposure to phantom carbon credits and misreported sequestration. Similarly, the extensive history of IFFs in minerals and fossil fuels, driven by tax evasion, profit repatriation, and bunkering, raises concerns regarding the integrity of methane and energy offset credits. In this sense, carbon trading does not introduce new illicit dynamics but re-packages existing ones within a novel financial architecture.

Table 1. Sectoral Vulnerability to IFFs in Africa’s Extractive Sectors

Sector	Pre-carbon IFFs ~ (USD lost/year)	Year	Mechanisms	Implications for Carbon Trading
Forestry	17 billion ⁵⁹	2016	illegal logging,	phantom carbon credits,
	1.6 billion ⁶⁰	2014	illegal wildlife	misreported sequestration
Minerals	50 billion ⁶¹	2010	tax evasion, profit	from selling unverified methane
& Fuel			repatriation	credits
(Oil & Gas)	110 billion ⁶²		illegal bunkering	
(Nigeria)		2000-2014	and mining	

Source: Author’s Compilation and inference

⁵⁹ Africa loses \$17bn to illegal logging annually. <https://www.cnbc africa.com/media/5572045821001/africa-loses-17bn-to-illegal-logging-annually/>

⁶⁰ C. Vandome and A Vines (2018). Tackling Illegal Wildlife Trade in Africa, Economic Incentives and Approaches. Chatham House.

⁶¹ Kar. D. and Cartwright-Smith, D. (2010): “Illicit Financial Flows from Africa: Hidden Resource for Development. Washington DC Global Financial Integrity. In: Africa Center for Energy Policy (2015) Illicit Financial Flows and The Extractive Industry in Ghana p. 2 <https://acep.africa/wp-content/uploads/2023/03/Illicit-Financial-Flow.pdf>

⁶² B. Ayodele and O. Bamidele. In the Shadows: Illicit Financial Flows in Nigeria’s Oil and Gas Sector. Dakar: Trust Africa. 2017. IN: Mercena Hunter, (2019). African illicit financial flows Designing and prioritising responses. p. 7 <https://globalinitiative.net/wp-content/uploads/2019/12/2019-11-26-african-illicit-financial-flows-012pdf.pdf>

6.2. Country-Level Inference and Carbon Market Exposure

Table 2 offers a country-level assessment of IFFs susceptibility in selected African carbon market frontrunners. Countries such as Kenya, South Africa, and Tanzania exhibit long-standing patterns of illicit resource extraction, trade mispricing, and tax abuse – mechanisms that are readily adaptable to carbon trading through overstated offsets, carbon laundering, and the use of shell companies. Rather than implying equivalence between pre-carbon and carbon-era losses, the table below illustrates how existing IFF infrastructures and governance weaknesses lower the transaction costs of illicit behaviour in carbon markets, thereby increasing exposure.

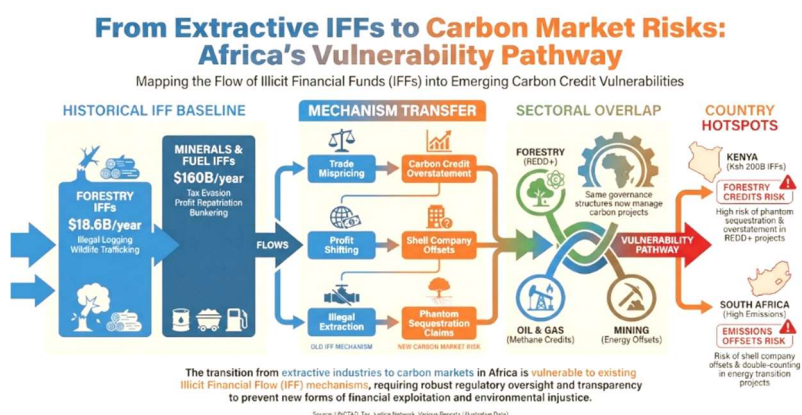
Table 2. Country-Level Analysis

Country (S/N)	Pre-Carbon IFFs ~ (Annual Loss)	Mechanism	Implications for Carbon Trading
Kenya	KSh 200 billion ⁶³	illegal mining, logging, And natural resource trade	phantom forestry carbon credits
South African	rand 1,007 billion ⁶⁴	trade mispricing, corporate tax abuse	overstated energy offset
Tanzania	sh 3.3 trillion (USD 1.5 billion) ⁶⁵	illicit wildlife, trade, bribery, and tax evasion	carbon laundering, shell companies

Source: Author's compilation

Hence, the estimates and inferences in this section are indicative rather than definitive, and consistent with the current state of IFF research, prioritising conceptual clarity, typological consistency, and policy relevance over precise quantification, obscurity, and data fragmentation (Africa Mineral Development Centre 2017, p. 20).⁶⁶

Figure 2. From Extractive IFFs to Carbon Market Risks



⁶³ Kenya Is Losing KSh 200bn Annually Through Illicit Financial Flows. <https://kenyanwallstreet.com/kenya-is-losing-ksh-200bn-annually-through-illicit-financial-flows/>

⁶⁴ <http://www.africanmonitor.org/wp-content/uploads/2017/04/IFF-Report-1.pdf>

⁶⁵ Tanzania loses Sh3.3 trillion annually to illicit trade. <https://www.thecitizen.co.tz/tanzania/news/national/tanzania-loses-sh3-3-trillion-annually-to-illicit-trade-4119948>

⁶⁶ According to the High-Level Panel (HLP) called for by the 4th Joint African Union/United Nations/Economic Commission for Africa (AU/ECA) Conference of African Ministers of Finance in 2012, the adopted term illicit financial flows reflect a much narrower and more focused definition: targeting unrecorded cross-border capital flows from criminal, corrupt (bribery and theft by government officials) and commercial activities”.

Figure 2 (an infographic) visualizes the structural continuity between the extractive sector's IFFs and the carbon markets. As shown in the left panel, forestry-related IFFs (USD 18.6B annually) and minerals (fuel) sector losses establish a robust baseline for assessing institutional vulnerability. The center panel demonstrates transferability: trade mispricing tactics employed in commodity exports readily adapt to carbon credit overstatement; profit shifting through obscure corporate structures now facilitates shell company offset schemes.

6.3. Case Evidence and Market Practices

Practically, there have been existential IFF risks in carbon trading. In Brazil, for instance, a criminal network led by Ricardo Stoppe illegally extracted and exported Amazon timbers to Europe and the United States, disguising the operation as carbon trading.⁶⁷ Another compelling case study is the Kariba carbon project in Zimbabwe, revealing a stark discrepancy in disclosed revenues. The developer (South Pole) initially reported transferring €40 million to its local project implementer to disburse to the local community in a media interview, but subsequently changed its tune to €57 million when confronted, making more from Kariba than it disclosed to the outside world.⁶⁸ Still, only €6 million of the money could be accounted for in the investigative report. As noted by Steve Wentzel (founder of the Kariba project), the money “had no backing, nothing behind it”. This mismatch exemplifies how opaque project accounting creates room for hidden flows.

Comparable dynamics are evident elsewhere. In Tanzania, a national audit found that only 3% of the projected revenue of TZS 1.2 trillion (USD 455 million equivalent) was captured due to poor pricing and opaque reporting.⁶⁹ Similarly, Kenya's carbon credits have reportedly been sold for as little as USD 8/tonne, below the international price of USD 80, indicating systemic underpricing and offshore arbitrage.⁷⁰ Fraudulent practices have also surfaced at the project level: CQC Impact Investor's USD 100 million carbon fraud,⁷¹ inflated cookstove usage data to generate approximately 30% more credits than actually existed, depicts how carbon projects in Africa have already been manipulated for illicit gains.

These patterns are not confined to Africa. In Europe, the Danish government admitted “that 80% of the country's carbon trading firms were fronts for the racket”.⁷² Likewise, a recent assessment of corporate carbon offset portfolios found that over one-third of credits held by the top-50 corporate buyers were classified as “likely junk”, with particularly high exposure in *forestry, energy, and waste-related* schemes across developing countries.⁷³ Notably, the fossil fuel companies accounted for the largest share of investment in flawed offset schemes with 43 per cent of their 81 million purchased credits.⁷⁴ This convergence lends empirical support to the OECD's (2023, p. 8) warning that the IFFs' vulnerabilities historically associated with oil commodity trading are likely to persist in the carbon market, given the “commonality of actors, institutions, the proliferation of opaque and complex financing vehicles or instruments, and the sheer scale and pace of change envisaged”.⁷⁵

⁶⁷ <https://news.mongabay.com/2024/12/illegal-timber-from-amazon-carbon-credit-projects-reached-europe-u-s/> 5

⁶⁸ <https://reddmonitor.substack.com/p/i-probably-will-go-to-jail-says-steve>

⁶⁹ <https://share.google/rtdFhXNnXnK79DU>

⁷⁰ <https://nation.africa/kenya/health/saudi-arabia-buy-carbon-credits-kenya-against-recommended-price-4848408>

⁷¹ <https://www.theguardian.com/environment/2024/oct/04/ex-carbon-offsetting-boss-kenneth-newcombe-charged-in-new-york-with-multimillion-dollar>

⁷² <https://www.newyorker.com/magazine/2023/10/23/the-great-cash-for-carbon-hustle>

⁷³ *Ibid*, 53

⁷⁴ *Ibid*

⁷⁵ Ref: interview with Petrobras Compliance Officer, and panel event at International Anti-Corruption Conference (IACC), December 2022.

7. The Resulting Harms and Impacts of Illicit Carbon Trading in Africa

7.1. Political Impacts: Questions on sovereign erosion, legitimacy strain, and bargaining asymmetry have been raised, reinforcing the existing geopolitical inequity. Akinwumi Adesina (outgoing President of the African Development Bank) has warned of a shift from “land grabs” to “carbon grabs”, stressing that carbon in Europe can fetch up to USD 200/tonne, while Africa’s credits sink as low as USD 3/tonne.⁷⁶ The African Development Bank (AFDB) estimated that African lands, despite generating USD 66 billion in carbon in 2022, accounted for only a fraction of this amount by African states. A reality Adesina describes as “nature rich and cash poor”.⁷⁷

At the project level, Zimbabwe’s 2023 attempt to cancel offset deals and demand 50% of all profits (following fraudulent activities on the Kariba REDD+ project)⁷⁸ exemplifies state-level sovereignty claims made from a position of weakness, with no clear guarantee that proceeds would support conservation or local communities, as over €100 million in revenues flowed to intermediaries, and communities received little. Little wonder, the whole idea of the carbon market has been likened to ‘carbon colonialism’ by activists.⁷⁹ Also, at the systemic level, Africa remains a price-taker in carbon markets despite being the world’s largest carbon sink. Auction platforms and voluntary standards set abroad dictate value and integrity benchmarks, whereas African negotiators have little or no say. These regulations, as empirical analyses have shown, are prone to persistent integrity risks, weak baselines, opaque accounting, and fragmented oversight that enable rent extraction and illicit outflows (Interpol 2013b, p. 11).

7.2. Socio-Economic Harms: Proceeds that should have been driven towards promises of community empowerment, sustainable development, and economic upliftment have remained unfulfilled. In Zimbabwe, villagers lamented that despite being told of the scheme’s financial success, they “do not know where the money is going,” as one community ranger, Rogers Kavura, testified.⁸⁰ In the East African states of Kenya, Uganda, and Tanzania, allegations of brokers cheaply buying from landowners and reselling at triple the price with little to no financial return reaching the people whose lands underpin the trade have been a common trend.⁸¹ In places like Liberia, where the financial allocation quota was publicly reported, there are no measures in place to ensure the purported allocated share of 30% reached the community. As David Young noted with Liberia’s UAE-backed Blue Carbon projects, “the methods of exploitation might be new, but the consequences are not so different from the last 200 years of land grabs.”⁸²

Rather, what prevails are issues of restricted land use, displacement of the local population, and loss of sustainable livelihoods. The IIED (2023) report warns that carbon credits are “distorting markets and destroying local businesses”. More perturbing are the human rights and

⁷⁶ Head of African Bank Warns of ‘Carbon Grabs’ by Foreign Firms. <https://e360.yale.edu/digest/akinwumi-adesina-carbon-grabs>

⁷⁷ *Ibid*

⁷⁸ Zimbabwe voids all existing carbon offset agreements, lays claim to half of future proceeds –report. <https://carbon-pulse.com/203600/>

⁷⁹ <https://panafricanreview.com/carbon-colonialism-and-land-grabs-africa-must-eat-or-be-eaten/> Retrieved August 26, 2025

⁸⁰ <https://www.theguardian.com/environment/2024/mar/15/money-carbon-credits-zimbabwe-conservation-aoe> Retrieved August 26, 2025

⁸¹ *Ibid*

⁸² African land grab – in the name of Carbon Credits. <https://euromed-economists.org/african-land-grab-in-the-name-of-carbon-credits/>

sexual abuses the market has facilitated. In Kenya's NRT case, this status quo was well documented with 31 testimonies drawn from current and former employees, along with members of the local community, unveiling a collection of evidence on sexual abuse of women at the project site.⁸³ In an interview, an employee in the NRT stated, "I can't allow my sister or wife to work at that company because the things that would happen to her there can affect her for the rest of her life."⁸⁴ Such abuses underscore how ICTs are not merely abstract financial leakages but concrete enablers of violence and inequality at the grassroots.

7.3. Environmental Impacts: Ample investigations reveal that many voluntary carbon credits traded globally do little to reduce GHG emissions, with billions wiped off their market value as investors lose confidence.⁸⁵ As such, rather than incentivising genuine decarbonisation, these markets often allow corporations to purchase cheap, low-quality credits as a license to continue polluting and double-counting. For Africa, the environmental consequences are particularly severe. Offsets frequently target high-biodiversity landscapes in countries such as Mozambique and Tanzania, where forests and fertile land are commodified for carbon storage. This fuels land grabbing, displaces subsistence farmers, and intensifies local conflict. An estimated hundreds of millions of hectares across Africa, collectively far larger than Uganda, have been leased or sold for carbon offsetting projects.⁸⁶ This worsens food insecurity and community resilience to climate change, for when the local population loses access to arable land and forest resources, they become more vulnerable to droughts, floods, and famine. In a continent that spends more than USD 50 billion on food imports and, at the start of this century, was more dependent on food aid than it was 35 years ago,⁸⁷ ICT intensifies both environmental degradation and climate vulnerability, thereby putting African countries into deeper cycles of ecological and economic dependence.

Case study: Nhambita Community Carbon Project in Mozambique⁸⁸

In 2003, Envirotrade (UK-based Company) presented a REDD+ project in Sofala's Púngue administrative area, engaging around 1400 local farmers, requiring them to cultivate and maintain trees on their farmland. Under a seven-year agreement, farmers are bound to care for the trees well beyond the contract period, potentially 50 to 100 years, effectively transferring these responsibilities to their descendants. In 2018, following Envirotrade's abrupt termination of the project, questions emerged regarding the project's actual contribution to poverty alleviation and biodiversity conservation, as compensation was tied to the size of land enrolled. Participants shouldered considerable implementation costs. Many farmers faced reduced earnings for failing to maintain the stipulated 85% tree survival rate. Others experienced delayed payment due to financial shortfalls. Even more troubling, scepticism spread among community members on whether carbon credits generated by their labour continued to be resold after the project's closure, heightening tensions within the community and dividing those who gained from the project and those who did not.

⁸³ Allegations of extensive sexual abuse at the Kenyan offsetting project used by Shell and Netflix.

<https://www.theguardian.com/environment/2023/nov/07/accusations-of-widespread-sexual-abuse-at-offsetting-project-used-by-netflix-and-shell-aoe>

⁸⁴ The sexual abuse case rocking the carbon offsetting industry. <https://www.fairplanet.org/story/the-sexual-abuse-case-rocking-the-carbon-offsetting-industry/>

⁸⁵ Carbon credit speculators could lose billions as offsets deemed worthless.

<https://www.theguardian.com/environment/2023/aug/24/carbon-credit-speculators-could-lose-billions-as-offsets-deemed-worthless-aoe>

⁸⁶ *Ibid*, 75

⁸⁷ *Ibid*

⁸⁸ The Legacy of the Community Carbon Project in Nhambita, Mozambique: Nostalgia, Disillusionment and Indignation. <https://www.wrm.org.uy/15-years-of-redd-Legacy-Community-Carbon-Project-Nhambita-Mozambique>

8. Structural and Systemic Enablers: Mapping Horizontal and Vertical Flows

The proliferation of illicit flows in Africa's carbon market is not accidental but the outcome of enabling conditions co-mingling at multiple strata. These enablers can be compartmentalized through a horizontal-vertical framework.

8.1. Horizontal Enablers: Structural Vulnerabilities

- a) **Weak Regulatory Oversight:** The architecture of carbon markets, already complex and transnational, becomes porous when situated in the African context, where regulatory systems are either underdeveloped, fragmented, or inadequately enforced. In West Africa, the Global Initiative Against Transnational Organized Crime (2023, p. 29) identifies serious weaknesses in anti-money laundering frameworks and insufficient information-sharing with other jurisdictions. Such gaps provide a convenient regulatory loophole for actors seeking to channel IFFs by disguising them as carbon trading. The absence of standardized, context-appropriate methodologies compounds regulatory weakness on the continent. Ernst & Young (2021) emphasizes that African VCM “require more oversight in terms of credit quality and transparency regarding the estimation of truly reduced or sequestered emissions.” The reliance on global methodologies that are not tailored to African ecological realities (such as pastoral agriculture or savannah fire management) creates ambiguities in measurements and verification. Although certification bodies like Verra and Gold Standard have begun publishing localized modules and using satellite data to improve baselines, “there are still gaps” allowing project developers and intermediaries to exploit methodological inconsistencies (Verra, cited in Wolcott 2022). This structural weakness paves the way for dubious credits to enter the market, thereby undermining environmental integrity and facilitating illicit trading practices.
- b) **Institutional Capacity Deficits:** Many African states do not have the tools and technical know-how to develop effective carbon market regulations (African Carbon Market Initiative 2024/5a, p. 34), leaving enforcement patchy and fragmented. The World Bank's Partnership for Market Implementation, for instance, operates in only five African countries, further underscoring limited coverage. Weak monitoring, reporting, and verification (MRV) systems intensify these gaps; even “the continent's biggest project developers struggle to access MRV support” (African Carbon Market Initiative 2024/5b: 34). This creates bottlenecks enabling low-quality or fraudulent credits to circulate. The existence of initiatives such as Natural State's training and digital MRV tools from firms like Verst Carbon remains insufficient to meet the scale of demand. These institutional deficits heighten vulnerability to corruption and illicit trade.
- c) **Market Informality and Opacity:** Many African project hosts and local communities are not adequately informed about the true market value of carbon credits, leaving them vulnerable to “carbon cowboys” who capitalize on this knowledge asymmetry to extract disproportionate profits (Lyster et al. 2013, p. 16). A new report noted that projects are often negotiated in opaque settings, with contracts signed individually with farmers or local actors who neither understand the terms nor the long-term implications.⁸⁹ Similarly, buyers face limited visibility over the breadth of African credits and their wider co-benefits. Although platforms like Xpansiv and AirCarbon Exchange showcase some projects, stakeholders

⁸⁹ Assessments argue carbon offsets are failing communities and climate goals.

<https://www.farmlandgrab.org/post/33198-assessments-argue-carbon-offsets-are-failing-communities-and-climate-goals>

consistently decry the absence of a centralized, transparent registry that aggregates Africa's carbon credit supply.⁹⁰ These foster illicit practices such as double-counting credits, misreporting emissions reductions, and diversion of revenues through shadow financial channels.

- d) **Corruption and Elite Captures:** As seen in Liberia's CHC scandal, rather than transparent procedures, bribery, clientelism, or political patronage have become ways in which allocation of land concessions and permits are executed on the continent (World Rainforest Movement 2020, p. 31). The principle of Free, Prior, and Informed Consent (FPIC) is frequently undermined, with communities excluded from decision-making about land encompassed by offset projects. Alongside, independent auditors who are paid and selected by project developers themselves face inherent conflicts of interest, creating incentives to overlook non-compliance (Carbon Market Watch 2025). Inspectors may accept bribes to ignore breaches, facilitate fraudulent carbon rights, or endorse exaggerated emission reduction claims (UNDP 2011, p. 41). These practices distort the integrity of carbon credits, allowing fraudulent or low-quality offsets to enter the market.

8.2. Vertical Enablers: Systemic Drivers

- a) **Global Corporate Dominance:** Global players ranging from project developers to commodity traders, verifiers, and brokers control the standards, finance, and downstream demand, shaping Africa's carbon market. In the wake of the 2022 market downturn, African projects were reported among the "hardest hit", particularly forestry and cookstove projects, which constituted nearly 90% of the continent's credit supply.⁹¹ Consequently, over-the-counter (OTC) prices fell drastically by 30-50%, with credits averaging USD 3 for renewable energy and USD 13 for REDD+.⁹² And as expected in a buyer-dominated market, corporations arbitrage standards and price differentials, pressure verifiers, and route trades through illicit channels like ghost credit, double counting, etc.
- b) **Regulatory Arbitrage:** This occurs when corporations exploit differences in legal, regulatory, and pricing systems across jurisdictions in maximizing profits. African credits trade predominantly in the OTC voluntary market at steep discounts (often USD 7-12 per credit), in stark contrast to pricing structures in Europe or North America, where credits routinely exceed USD 100/tonne (e.g., USD 109-110 in the EU ETS).⁹³ This pricing disparity creates room for multinational corporations and intermediaries to purchase cheaper African credits, resell or bundle them elsewhere, and capture wide margins, further facilitating underreporting, profit shifting, and transfer mispricing. Additionally, weak domestic regulations in many African states make the continent structurally dependent on international demand. Corporations and traders exploit this dependency not just in prices but also in monitoring and verification standards. Investigations show some certification systems overstated deforestation risks by 400%, with 90% of rainforest offsets failing to represent real reductions.⁹⁴

⁹⁰ African Carbon Market Initiative (2024) 'Africa Carbon Markets: Status and Outlook Report 2024-25' https://africacarbonmarkets.org/wp-content/uploads/2024/07/ACMI_Status-and-Outlook-Report-2024-_v2.pdf (August 25, 2025)

⁹¹ African Carbon Projects Bear the Brunt of Market Dip. <https://africanclimatewire.org/2024/09/african-carbon-projects-bear-the-brunt-of-market-dip/>

⁹² *Ibid*

⁹³ How can Africa get a fair price for its carbon credits? <https://african.business/2023/07/resources/how-can-africa-get-a-fair-price-for-its-carbon-credits>

⁹⁴ <https://www.morfo.rest/article/verra-vs-guardian-carbon-offsets> Retrieved August 26, 2025

- c) Climate Finance Asymmetry: The case of Gabon's Forest Reference Emission Level (FREL) is illustrative.⁹⁵ In its 2021 submission to the UNFCCC, Gabon applied methodological "adjustments" that transformed the projected 16.5 million tonnes net emissions balance into a claimed 90.6 million tonnes carbon removals. Despite these inflated baselines, the UN technical review described the data as "mostly consistent" and "mostly accurate", allowing Gabon to position itself for large volumes of carbon finance. As such, countries like Gabon that demand carbon finance from external sources face pressure to present inflated baselines or questionable additionality to access scarce funding streams. Such practice enables structural inequities and overstated credits, allowing global buyers to profit rather than genuine mitigation.

9. Recommendations: Policy Interventions and Implementation Pathways

Adopting a top-down approach, this essay outlines a set of policy proposals together with key actors responsible for addressing illicit carbon trading in Africa.

9.1. International Communities:

- a) First, international partners comprising UNDP, AfDB, and World Bank should endeavor to support the development of regional shared-service registries on the continent. These registries, when linked to global transaction logs, would deter double issuance and create immutable trails of carbon trades. This would enhance transparency in the carbon market and limit the structural space within which illicit flows thrive. At the same time, this would ensure beneficial disclosure of ownership: those who own carbon credits from a given project would be publicly known. Technically and legally, this is not impossible. It is technically possible to make information about account holders and owners publicly available, and all registries that operate with accounts linked to particular businesses. This is a viable option, as evidenced by the fact that at least two registries currently do this: the Global Carbon Council and the UK Woodland Carbon Code (Carbon Market Watch 2023, p. 12).
- b) Standard frameworks like the Integrity Council for Voluntary Carbon Markets (IC-VCM) and VCM Integrity initiative (VCMI), which provide a complementary approach in governing supply and demand sides of VCM, should be embedded into Africa's ACMI as a regional anchor in ensuring that African projects are benchmarked against Core Carbon Principles (CCPs). This integration would reduce systemic loopholes in vertical accountability.
- c) Given that carbon market IFFs are often masked as financial crimes, international enforcement platforms like the Egmont Group of Financial Intelligence Units (FIUs), INTERPOL, and regional prosecutor networks can help African FIUs detect, investigate, and prosecute illicit flows linked to carbon trading. The US-Peru MoU on environmental crime provides a useful precedent: targeted bilateral agreements can enhance training, intelligence sharing, and disruption of trade-based laundering.
- d) With inconspicuous price flows allowing large portions of proceeds to be siphoned off by intermediaries, international standard setters like Verra should therefore require disclosure of gross prices, transaction fees, and net revenues accruing to local communities. In turn, regional transparency portals linked to international platforms would expose discrepancies, ensuring African projects and communities are not financially hollowed out.

⁹⁵ Bank-of-evidence-climate-false-solutions_EN_Nov-2023.pdf https://www.foei.org/wp-content/uploads/2023/11/Bank-of-evidence-climate-false-solutions_EN_Nov-2023.pdf

- e) Operationalization of the sanction framework (suspension, delisting, and cross-border recognition of penalties) to deter bad actors should be facilitated by international supervisory bodies. In turn, African states, through regional economic communities (RECs), can domesticate such enforcement tools, ensuring penalties imposed internationally are reflected in their registries. This would dispel the system against regulatory arbitrage.

9.2. Government, Policymakers, and Regulatory Agencies

- a) As the African carbon market is relatively new with a weak financial tracking system and complex governance, robust legislative frameworks clearly defining carbon rights, ownership structures, and benefit-sharing mechanisms should be established by African governments. Recent calls on Kenya's Parliament to halt carbon credit fraud⁹⁶ underscore the urgency of codifying transparent procedures for registering, monitoring, and transferring credits to minimize exploitative practices and concealment of proceeds from carbon trade.
- b) Regulatory agencies like the African Organisation for Standardisation (ARSO) and its National Standard Bodies (NSB) must be strengthened to monitor compliance and enforce standards. This includes integrating digital verification systems, such as blockchain-enabled registries, that enhance traceability and reduce manipulations of carbon accounting, thereby ensuring that credits generated within Africa are not mispriced to the detriment of domestic economies. The World Bank's Climate Warehouse program has been the vanguard of this effort, culminating in the operationalization of the Climate Action Data Trust (CAD Trust).⁹⁷ Established in collaboration with the Government of Singapore and the International Emissions Trading Association (IETA), the CAD Trust is a decentralized, open-source platform that implements a public metadata layer for the global carbon market.⁹⁸ The CAD Trust does not replace existing registries; rather, it connects them using blockchain technology.⁹⁹ Participating registries, ranging from national systems in Chile, Rwanda, and the UK to independent standards like Verra and Gold Standard, publish standardized information about their projects and credits to the CAD Trust.
- c) In addition, regional harmonisation of standards through platforms such as the African Union (AU) and RECs should be fostered. This would prevent regulatory arbitrage, where buyers exploit weaker jurisdictions. Ultimately, this would strengthen Africa's collective bargaining power in global carbon governance—rather than divergent national approaches which undermine cross-border enforcement.
- d) Likewise, inter-agency collaboration must be championed across FIU, environmental ministries, and revenue authorities. This would enable data gathering and sharing, risk mapping, and joint enforcement actions, addressing the inherent cross-sectoral peculiarity of carbon markets, and reducing systemic vulnerabilities.

⁹⁶ Parliament called upon to stop carbon credit fraud <https://nation.africa/kenya/health/parliament-called-upon-to-stop-carbon-credit-fraud-5111648>

⁹⁷ mdb's climate actions on article 6, https://www.ebrd.com/content/dam/ebd_dxp/assets/pdfs/green/knowledge-hub/MDB-s-Climate-Actions-on-Article-6.pdf. Also, see Climate Warehouse: End-to-End Digital Infrastructure for Carbon Markets, <https://academy.worldbank.org/en/planet/climate-change/climate-warehouse-end-to-end-digital-infrastructure-for-carbon-markets>

⁹⁸ Climate Warehouse | PARTNERSHIP FOR MARKET IMPLEMENTATION, <https://www.pmiclimate.org/node/579>

⁹⁹ Climate Warehouse Simulation III – World Bank Documents & Reports, <https://documents1.worldbank.org/curated/en/099605009212233328/pdf/IDU09ef226cf0a663041d60869f07078d1af9fd3.pdf>

9.3. Industry Groups, Professional Alliances, and Associations

- a) Through setting codes of conduct, industry associations can mandate transparency, disclosure, and integrity in carbon credit generation and trading. Regular auditing, public disclosure of financial flows, and participatory monitoring can become membership obligations. By aligning their standards with initiatives such as the ICVCM and VCMI, they can help harmonize verification protocols and benefit-sharing mechanisms. This would reduce opportunities for misreporting or manipulation of carbon credits, foster comparability across markets, and address grievances fueling distrust in carbon markets.
- b) As parallel pressure groups, industry associations could advocate better governance regimes such as centralized registries, quality-assured MRV systems, and restrictions on eligibility similar to the South Korean Emission Trading Scheme (K-ETS), where only registered, compliant, and traceable entities could trade.¹⁰⁰ This would reduce the grey areas where speculative middlemen thrive.
- c) Professional alliances can establish independent verification networks that complement national registries and third-party raters. These associations could maintain shared digital repositories of verified projects, supported by blockchain-based traceability tools, to track the life-cycle of carbon credits and ensure their authenticity. Such industry-driven transparency would mitigate risks posed by shell companies or double-counting of credits.
- d) Given the transnational nature of both carbon trading and IFFs, industry alliances should foster cross-border information exchange. Regional coalitions of African carbon market associations could collaborate with international partners to share intelligence, harmonize compliance practices, and identify suspicious transactions that may involve tax havens or regulatory arbitrage.

9.4 Carbon Registries

Existing fragmentation of registries, often operating in isolation, creates silos that illicit actors can exploit. To address this, African carbon registries should be both regionally and globally (ITL) linked to facilitate real-time cross-checking of transactions. Such interoperability would reduce phishing and hacking, enhancing due diligence in monitoring cross-border flows. This would ensure double authentication of credit transactions.

9.5. Buyers (Companies and State Purchasing Credits)

- a) From project developers, buyers should request disclosure of free, prior, and informed consent, revenue flows, risk management, and benefit-sharing plans before approving purchases. By doing so, buyers can help in establishing an integrity filter that reduces the likelihood of financial latency and hidden profit diversion.
- b) By collaborating with project investors, buyers could set due diligence criteria that reward projects with fair revenue allocation, opportunity-cost compensation, and non-monetary benefits (e.g., community capacity-building), upon which projects can be qualified for premium offtake. This would deter exploitative practices that often underpin IFFs. Equally, contractual levers in purchase agreements, such as performance guarantees and credit-recall clauses, should be leveraged by buyers to deter non-compliance by developers. This would deepen accountability across the carbon value chains.
- c) As a caveat, buyers should conduct independent monitoring and impact assessments as prerequisites for purchasing credits. Such independent checks across socio-environmental

¹⁰⁰ South Korea Emissions Trading Scheme (ETS). https://ieta.b-cdn.net/wp-content/uploads/2023/10/2023_IETA_BizBrief_SouthKorea_V2.pdf

impacts and periodic monitoring of community benefits create an audit trail that minimizes opportunities for misreporting or financial manipulation. This would further anchor integrity by aligning purchases with recognized international and regional standards such as ISO 4064, the Gold Standard, Verified Carbon Standards, and Plan Vivo. Reliance on established standards enhances comparability, ensures environmental and social integrity, and reduces the risk of “junk credits” entering the market.

9.6. Sellers and Project Developers

To stem illicit practices, sellers should use tools that guarantee fairness and transparency. For instance, an escrow arrangement can be utilized to manage revenues so that funds are released as agreed, preventing hidden diversion. Also, sale contracts should include clauses imposing penalties on developers to meet standards. Independent auditing of both project performance and revenue flows should be performed before issuance of credits. Necessary buffer pools or reversal insurances should be put in place by sellers to ensure financial transparency and stability in project operations. Moreover, sellers should commit to trading credits on publicly accessible exchanges rather than hidden, OTC channels. Public trading platforms expand participation, foster price transparency, and reduce the opportunities for fraudulent dealings or hidden profit diversion.

9.7. Financial Intermediaries (FIs)

- a) As seen in both African financial institutions and global AML/CFT means Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) experiences, FIs (commercial banks, investment funds, insurers, pension funds, brokers, and development finance institutions) strengthen internal controls to address risks linked to environmental crimes. For carbon trading, this means integrating carbon-market-specific due diligence in customer onboarding, credit evaluation, and transaction monitoring. FIs can employ red-flag indicators such as inconsistencies in project documentation, dubious project origins, or unexplained spikes in credit volumes to identify suspicious activity. Just as Singapore’s AML/CFT Division partnered with industry associations in the precious stones sector, African banks and associations could collaborate to develop tailored guidance for carbon credit transactions.
- b) Globally, FIUs have found supply chain choke-points—refineries, mills, ports—to be critical nodes for detecting IFFs. Similarly, FIs in carbon markets should focus oversight on project verification entities, registries, and brokers; points where manipulation is most likely to occur. Enhanced monitoring of funds at these nodes, alongside parallel financial investigations, can disrupt laundering networks. Brazil’s *Operation Archimedes* demonstrates the value of tracing unusual surges in exports (timber) to uncover more financial crimes.¹⁰¹ In relation to the carbon market, sudden surges in credit issuances from projects should trigger reviews.
- c) Suspicion Transaction Reports (STRs), which have been pivotal globally in mapping environmental crime networks, can be adopted. In Africa, FIs should be mandated and encouraged to file STRs specific to carbon market transactions, particularly where there are anomalies in project financing, sudden transfers through tax havens, or opaque ownership structures of project developers.

¹⁰¹ <https://www.unodc.org/cofrb/en/noticias/2025/7/after-training-provided-by-the-unodc--brazils-federal-highway-police-carries-out-operation-and-seizes-seven-lorries-carrying-illegal-timber-in-the-amazon.html> Retrieved August 28, 2025

- d) Just as financial institutions involved in logging or wildlife trade request Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) *permits* or attestations, FIs in carbon trading should require third-party verification certificates, host government approvals, and registry confirmation before engaging in a transaction.

9.8. Local Communities

Adherence to socio-environmental safeguards as outlined in the Cancun framework depends on significant local involvement, as communities are best positioned to monitor compliance on the ground. Their participation in verification processes and oversight of independent validation would strengthen transparency and reduce opportunities for financial manipulation. Also, inclusive and collaborative benefit-sharing mechanisms where communities co-determine how revenues are allocated, whether as cash transfers, infrastructure, or social investments, would curb financial leakages and guarantee that resources flow transparently to the people or projects.

10. Conclusion

The accelerating “carbon rush” in Africa unfolds at a critical historical juncture. Through illicit market practices, such as shell companies, carbon laundering, and overinflated offsets, the carbon market has been polluted illicitly. This essay demonstrates that, absent robust governance, the market risks reproducing the very “resource-curse” patterns that have long undermined the continent’s political economy. Polanyi’s *fictitious commodities* and Akerlof’s information asymmetry theories show that the characteristics of carbon credits (intangibility, abstractness, and heavy intermediation) make the market uniquely prone to speculative manipulation and, consequently, illicit financial flows.

Nevertheless, taming carbon markets from financial hollowing requires political will and a decisive shift in Africa’s positioning within the global climate economy. Henceforth, African states must act collectively and decisively through continental platforms such as the African Union and the African Continental Free Trade Area (AfCFTA) to harmonize standards, curb regulatory arbitrage, and strengthen bargaining power vis-à-vis global buyers. Also, integrity-proof market infrastructure must be established, including shared registries and transparent, technology-enabled verification systems that track credits and revenue across borders. Likewise, domestic legal frameworks must codify carbon ownership and mandatory benefit-sharing arrangements with communities, who are the de facto custodians of Africa’s carbon sinks, to retain a meaningful share of the generated value (Soliev et al. 2021, pp. 2-10). With this adaptive governance, coordinated policy action, and a sustained commitment to transparency, Africa can ensure that the carbon market serves as an instrument of climate justice and development finance, rather than as a conduit for illicit flows.

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Indigenous Peacebuilding: Bridging the Gap to Sustainable Peace in Zambia and Beyond

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Abstract: Peace and justice are foundational pillars of human dignity, social stability, and sustainable development. However, existing justice systems are increasingly struggling to address the underlying causes of conflict. Rising youth unrest, social fragmentation, and large-scale displacement suggest that legal institutions alone are inadequate for building lasting peace. Indigenous peacebuilding systems—rooted in community participation, restorative dialogue, and shared cultural norms—have historically provided means for preventing disputes and maintaining peace. These systems operate not primarily through punishment but through mediation, reconciliation, and collective accountability. Across Africa, such indigenous peacebuilding systems include councils of elders, community assemblies, and symbolic reconciliation rituals that aim to repair relationships rather than merely adjudicate wrongdoing. In Zambia, examples include the Bemba Icbwela, the Ngoni Inkhosi council, the Lozi Kuta, and the Tonga Bukata assemblies. Although these institutions continue to operate in many communities, they remain largely absent from national policy frameworks and academic documentation. This paper argues that indigenous peacebuilding traditions represent a valuable yet underutilised resource for addressing 21st-century social challenges in Zambia and beyond. By examining how these systems function and how they have contributed to conflict prevention, the essay highlights their potential role in strengthening modern justice systems and promoting sustainable peace.

Keywords:

1. Conflict transformation
2. Indigenous peacebuilding
3. Justice systems
4. Peace education
5. Refugee displacement

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1. Introduction

Peace and justice are foundational pillars for human dignity, societal stability, and sustainable development. While formal justice systems are essential for maintaining the rule of law, they often address disputes only after they escalate, leaving underlying causes of conflict - such as limited dialogue, economic marginalization, and lack of conflict resolution skills - unresolved (Ministry of Youth, Sport and Arts, 2024; Truter, Gunter and du Toit, 2025).

Indigenous peacebuilding systems, by contrast, operate proactively, emphasizing community participation, mediation, reconciliation, and collective accountability. In Zambia, examples of these systems include the Bemba Icbwela, the Ngoni Inkhosi council, Lozi Kuta, and Tonga Bukata assemblies. They aim to prevent disputes, repair relationships, and maintain social cohesion; yet they remain largely absent from formal policy frameworks and systematic academic documentation (Ademola, 2021; OECD, 2020).

Zambia faces a dual challenge. Firstly, as host to over 105,000 refugees and asylum seekers (UNHCR, 2024), the formal legal system is under pressure to adjudicate disputes fairly while addressing complex intercultural conflicts. Secondly and simultaneously, the country must contend with rising youth unrest, political violence, student protests, and mental health challenges such as suicide. Between 2018 and 2023, the University of Zambia experienced eight major student riots, five of which became violent, while youths accounted for over 65% of those arrested for political violence (Ministry of Youth, Sport and Arts, 2024; Anderson, 2022).

The limitations of reactive legal systems underscore the value of integrating indigenous peacebuilding mechanisms. Traditional forums offer accessible, culturally resonant platforms for early conflict detection and resolution, complementing the procedural rigor of formal courts. International examples—including Rwanda’s Gacaca courts, Uganda’s Mato Oput, Canada’s Truth and Reconciliation Commission, and New Zealand’s Rangatahi Courts—demonstrate how hybrid approaches combining formal and indigenous systems can enhance social cohesion, reduce crime, and promote restorative justice (Clark, 2010; Baines, 2007; OECD, 2020; Quince, 2018).

Grounded in this context, the present paper examines Zambia’s indigenous peacebuilding systems as underutilized but vital resources for addressing conflict and social challenges. Integrating these traditions with formal justice frameworks offers a holistic approach to sustainable peace, proactive conflict management, and meaningful youth engagement.

2. Historical and Global Context of Indigenous Peacebuilding

2.1. History of Indigenous Peacebuilding Traditions in Africa

African peacebuilding and conflict resolution traditions have origins that extend centuries before the establishment of colonial boundaries and the emergence of written legal codes. These traditions are deeply interwoven into the fabric of African societies, emphasizing harmony and community resilience even in the face of adversity (Moghalu, 2021, p. 33). Rather than rigidly enforcing punitive measures, these systems operate dynamically, seeking restoration and the preservation of relationships as their primary objective. Traditional justice systems across the continent typically conceptualize conflict as a rupture within familial, tribal, or inter-village relationships—disruptions that require repair rather than retribution. Restoration is thus prioritized over punishment, offering a more humane and community-

centred approach to justice (Murithi, 2006, p. 19). Elders' councils, acting as arbiters and custodians of community values, play a central role in mediating disputes and guiding conflicted parties toward reconciliation.

Despite the disruptions of colonialism and modern pressures, African peacebuilding traditions have shown remarkable adaptability. There is an ongoing rediscovery among local governments and communities of the value and relevance of these traditions, particularly in contexts where formal legal systems are overwhelmed or lack public trust.

2.2. Core Characteristics: Councils, Rituals, and Inclusivity

While the methods of conflict resolution differ across Africa's diverse cultures, certain core principles are widely shared. Foremost among these is the use of councils, which often include elders, community leaders, and even women and youth. These councils operate within highly inclusive frameworks, ensuring all voices are heard and justice is not monopolized by any single group.

Women's participation is pivotal in many traditions. In some Zambian societies, women serve as truth witnesses or fact-checkers, especially in cases concerning family and community welfare (Okech, 2022, p. 44). Their involvement not only promotes gender inclusivity but also enhances the legitimacy and quality of the process. Youth, meanwhile, are active as messengers, observers, and apprentices, learning valuable skills in dialogue, mediation, and compromise (Altiok et al., 2022, p. 61).

Reconciliation processes often include symbolic acts, such as the sharing of food or drink, the exchange of gifts, or public gestures of apology before the assembled community. The Acholi of Uganda, for example, practice *Mato Oput*, a ritual in which disputing parties share a bitter drink together to signify acknowledgment of wrongdoing and a collective commitment to move forward. This act embeds the agreement within the community's collective memory, sustaining a long-term commitment to peace (Okoth, 2020, p. 58). Rather than focusing on blame and punishment, the aim is to restore harmony and relationships (Murithi, 2006, p. 23; Lederach, 1997, p. 46).

2.3. How Indigenous Peacebuilding Processes Operate

Drawing from existing literature on African indigenous justice systems, indigenous peacebuilding processes typically follow a structured, yet flexible sequence of stages designed to prevent escalation of conflict and restore social harmony (Murithi, 2006; OECD, 2020; Ademola, 2021). Although procedures vary across cultures, most systems share common operational features centred on dialogue, participation, and restoration.

Conflict Identification and Initiation

Indigenous peacebuilding processes may be initiated in one of two ways. Most commonly, one or both conflict parties brings the matter to the attention of a traditional authority—such as a chief, elder, family head, or council representative—by lodging a complaint or request for mediation. In some traditions, community elders or uninvolved neighbours who observe escalating tensions may also alert traditional authorities before a formal complaint is made. In either case, these leaders act as custodians of community values and assess whether the conflict requires mediation at the community level (Murithi, 2006, p. 19; Ademola, 2021, p. 94). Unlike formal courts where cases are initiated through legal filings, indigenous systems allow conflicts to be identified and addressed at an early stage before escalation.

Convening of Traditional Councils

Once a dispute is accepted for mediation, a council is convened. These councils typically include elders, traditional leaders, the affected parties, and witnesses. In many traditions, uninvolved women and youth representatives are also present as neutral participants—neither advocates for either party nor decision-makers, but truth witnesses, observers, and apprentice mediators whose presence reinforces the legitimacy and fairness of the process (OECD, 2020, p. 41; Altioik et al., 2022, p. 61). The inclusive composition of these forums promotes collective ownership of outcomes and helps create an environment that encourages honesty and accountability.

Hearing and Dialogue Process

A key stage in indigenous peacebuilding involves open dialogue in which each party presents their account of events. These hearings emphasize truth-telling, acknowledgement of harm, and mutual understanding rather than adversarial legal argumentation (Moghalu, 2021, p. 33). The process is typically conducted in local languages and cultural settings familiar to participants, making it more accessible than formal court environments. Elders guide discussions carefully to reduce hostility and encourage constructive engagement.

Mediation and Reconciliation Phase

Following the hearing process, elders facilitate mediation aimed at restoring relationships rather than assigning blame. The focus is on identifying the root causes of the dispute and promoting reconciliation through dialogue and consensus building (Murithi, 2006, p. 23). This restorative orientation reflects the broader African philosophy that conflict represents a breakdown of social relationships that must be repaired rather than simply punished.

Resolution and Symbolic Closure

Resolutions typically involve mutually agreed outcomes such as apologies, restitution, or symbolic reconciliation acts. These might include, for example, the exchange of gifts between the parties, the performance of a shared ritual, or the public offering of a formal apology before the assembled community. In some traditions, more elaborate rituals mark the closure of conflict: among the Acholi, Mato Oput involves both parties drinking a bitter concoction together, signifying that the wrong has been acknowledged and that both sides commit to coexistence (Baines, 2007, p. 290; Okoth, 2020, p. 58). Such symbolic actions reinforce the seriousness of agreements and embed them within collective community memory.

Community Enforcement and Follow-Up

Unlike formal justice systems which rely on legal enforcement mechanisms, indigenous systems depend largely on social accountability and community monitoring to ensure compliance (OECD, 2020, p. 52). Because resolutions are reached collectively and publicly, social pressure often encourages adherence to agreed outcomes. This community-based enforcement mechanism strengthens sustainability of peace agreements while minimizing the need for coercive enforcement. Overall, these processes demonstrate that indigenous peacebuilding systems function not as informal or ad hoc mechanisms, but as structured governance processes with clear procedures, defined roles, and measurable social outcomes. Their preventive orientation, accessibility, and restorative focus explain their continued relevance in addressing contemporary social conflicts and highlight their potential contribution to hybrid justice models (Ademola, 2021, p. 88; OECD, 2020, p. 46).

2.4. Conceptual Model of Indigenous Peacebuilding Processes

Indigenous peacebuilding processes operate as a cyclical, community-centred system designed to prevent, manage, and resolve conflicts. While practices differ across cultures, most systems share a common logic:

- **Early Identification of Conflict** — A dispute is typically brought forward by one or both conflict parties, though community elders may also detect and raise alarm before a formal complaint is made.
- **Community Dialogue and Mediation** — Disputing parties are brought together in forums such as councils, assemblies, or gatherings, with elders or respected leaders facilitating discussion.
- **Inclusive Participation** — Uninvolved (i.e., uninvolved in decision-making) women, youth, and other community members actively contribute as truth witnesses, observers, or advisors, lending legitimacy without advocacy.
- **Restorative Resolution** — The focus is on reconciliation, relationship repair, and symbolic gestures (e.g., shared rituals, gift exchanges, public apologies) rather than punishment.
- **Community Oversight** — The broader community monitors adherence to resolutions, reinforcing norms and sustaining peace.

This process emphasizes prevention, participation, and restoration, making indigenous systems uniquely suited to address underlying social tensions and complement formal justice mechanisms (Murithi, 2006, p. 19; OECD, 2020, p. 41; Ademola, 2021, p. 88). Conceptually, it positions indigenous peacebuilding as a preventive governance system, not merely a cultural practice, highlighting its potential role in strengthening modern justice frameworks and promoting sustainable social cohesion.

3. Indigenous Peacebuilding in Practice: Case Examples from Africa

The African continent, shaped by experiences of conflict and colonial disruption, has increasingly turned to its cultural roots and revived traditional mechanisms that historically maintained social order and resolved disputes. Case studies from Zambia, Rwanda, Uganda, and Botswana illustrate the influence and continued relevance of these local approaches in promoting peace and reconciliation.

3.1. Zambia: Lozi Kuta, Bemba Icibwela, Ngoni Inkhosi, and Tonga Bukata

In Zambia, indigenous peacebuilding systems remain deeply embedded in rural and peri-urban life, reflecting the country's ethnic and cultural diversity. Each tradition offers unique insights into how communities approach justice and reconciliation.

Lozi Kuta

Historically, in Western Province of Zambia, the Lozi Kuta—an informal council composed of senior advisers to the Litunga (King)—has served as the ultimate authority on matters pertaining to land, inheritance, and family disputes. Beyond these core areas, the Kuta also handles disputes over water access, livestock boundaries, and marital obligations, reflecting its broad mandate as the primary governance forum for Lozi communities.

A dispute is brought before the Kuta when one or both parties lodge a complaint with a village induna (sub-chief), who acts as a first-level assessor. If the matter cannot be resolved at that level, the induna forwards it to the Kuta's senior councillors. Youth members of the council—known as indunas-in-training—serve as messengers at this stage: they carry formal notification of the hearing to the disputing parties and to witnesses, traveling between homesteads to ensure all relevant persons are summoned. Their role is not merely logistical; delivering a summons from the Kuta carries the weight of royal authority, and the messenger's conduct during this process is itself observed as part of their civic apprenticeship.

The session is held in the kuta (council house), an open-sided structure that allows the wider community to attend as spectators. The Litunga's senior representatives preside, with senior male elders on one side and, in matters involving family welfare or marital disputes, designated female councillors on the other. These women serve in a formally recognized role as truth witnesses—tasked not with advocacy but with cross-checking accounts given by the parties against community knowledge. Their testimony carries equal weight to that of the male elders. Each party speaks in turn, uninterrupted. The presiding councillor controls the order of speaking strictly; no party may address another directly. After both sides and witnesses have spoken, elders deliberate before announcing the resolution publicly. Resolutions take the form of a symbolic gift exchange, a public apology, or, in land cases, a formal reallocation confirmed by the Litunga's seal. Field Data indicate a 38% reduction in land-related violence in Western Province between 2018 and 2023, a period of active Kuta documentation (Field Data, 2025).

Bemba Icibwela

Within the Bemba community of Northern Zambia, the Icibwela is a community-wide gathering convened under the authority of the Chitimukulu, the paramount chief. Proceedings are opened by the Chitimukulu's appointed representative, who formally names the matter before the assembly and invites each party to speak in turn. Crucially, parties address the gathering rather than each other directly, reducing the risk of confrontation and keeping the tone restorative rather than adversarial. Community elders may question either side before deliberation begins.

Women in the Icibwela serve formally as mediators—they do not hold the same deliberative authority as the senior male elders, but they occupy a distinct and necessary role: in disputes involving family welfare, domestic relations, or community resources, proceedings are considered incomplete without a woman mediator who can speak to the relational dimensions of the conflict. Youth attend as observers and are tasked, following the session, with carrying the agreed resolution to affected households—a messenger role that ensures the outcome is known throughout the community, not only by those present. Rather than issuing punitive judgments, the Icibwela focuses on recognition, restoration, and reconciling those who were wronged, concluding with a communal acknowledgment that the matter is closed (Field Data, 2025).

Ngoni Inkhosi

In Eastern Province, Ngoni Inkhosi forums convene councils composed of chiefs and sub-chiefs who resolve conflicts within Ngoni society. The Inkhosi is distinguished by its deliberately broad participation: women attend not merely as observers but as voices on matters affecting household welfare and inter-family relations, and youth serve as both witnesses and as recorders of the agreed resolution, reinforcing their role as the community's institutional

memory. This inclusive structure allows the community to make legitimate and long-lasting decisions, averting conflicts based on unaddressed complaints (Field Data, 2025).

Tonga Bukata

The Southern Province is known for the Tonga Bukata tradition, where community assemblies take place under the shade of large trees (Okech, 2022, p. 19). What distinguishes the Bukata tradition is its focus on symbolic exchanges—such as the giving of animals—which serve to restore social harmony and resolve disputes. Women participate in clearly defined roles distinct from those of adult men: they serve as truth witnesses and fact-checkers, particularly in cases where the credibility of testimony about household or community matters is in question, and their verification of facts is treated as authoritative by the council. Youth, meanwhile, serve as junior mediators and messengers—a role that involves not only carrying communications between the parties during proceedings, but also monitoring compliance with the resolution in the weeks that follow, reporting back to elders if either party fails to honor the agreement (Okech, 2022, p. 21). In South Sudan, similar roles and procedures have been modeled after the Bukata tradition, further highlighting its adaptability and effectiveness (Okech, 2022, p. 23).

Case studies from Rwanda, Uganda, Botswana, and Zambia demonstrate that these traditional peacebuilding methods are not merely historical practices, but dynamic systems with proven success in their communities. Despite the challenges facing traditional justice mechanisms, these approaches possess significant potential for moral progress and community healing (Okech, 2022, p. 25).

3.2. Rwanda: Gacaca Courts

In the aftermath of the 1994 genocide, Rwanda faced an overwhelming judicial burden, with hundreds of thousands of genocide-related cases far exceeding the capacity of the formal court system. To address this, the government revived the Gacaca courts, a community-based justice mechanism rooted in traditional dispute resolution practices. Between 2001 and 2012, the Gacaca system processed approximately 1.9 million cases, significantly accelerating the delivery of justice while promoting widespread citizen participation. Beyond addressing genocide-related crimes, the courts also became a forum for resolving broader community disputes that emerged in the post-conflict period. While the system contributed to truth-telling, accountability, and elements of reconciliation at the local level, its overall impact on social cohesion and long-term peace has been observed through the reduction violent disputes (Clark, 2010; Longman, 2009; Brehm, Uggem, and Gasanabo, 2014).

3.3. Uganda: Mato Oput

The region of Northern Uganda, specifically among the Acholi people, suffered generations of violence at the hands of the Lord's Resistance Army, causing massive displacements and a devastating cycle of revenge. It was in this fragile context that the Acholi people reconstructed and reinstated the ancient pre-colonial practice of Mato Oput.

A Mato Oput process typically begins when clan elders from both the offending and the affected family agree to pursue reconciliation. The two clans negotiate through intermediaries over a period that may last weeks or months, establishing the facts of the harm, agreeing on appropriate compensation, and setting a date for the ceremony. On the day of the ceremony, both clans gather at a designated communal space. Elders' open proceedings by recounting the history of the conflict and calling on both parties to speak openly about the harm caused and

the suffering endured. Women attend as witnesses and moral anchors—their presence signals community sanction of the process—while youth observe and assist with logistical duties, learning the practice by participation.

The ceremony culminates in both parties drinking together from a vessel containing the bitter mato oput root mixed with water, a shared act that symbolizes the mutual swallowing of bitterness and the commitment to coexist. The compensation agreed in advance—typically livestock or other goods—is transferred publicly, embedding the resolution in communal memory. Community members who witness the ceremony become guarantors of the agreement, creating social accountability that discourages relapse into conflict (Baines, 2007, p. 290; Okoth, 2020, p. 58).

Between 2005 and 2015, the Acholi sub-region experienced a reduction of over 40% in recorded revenge attacks, a change closely linked to the regular practice of Mato Oput (Uganda Amnesty Commission, 2016, p. 27). Scholars note that the effectiveness of this system lies in its holistic approach, which addresses psychological wounds, fosters trust, and supports the reintegration of former combatants into society (Baines, 2007, p. 294; Okoth, 2020, p. 58).

3.4. Botswana: The Kgotla

The Kgotla is a traditional community assembly led by a chief or headman, serving as both a public meeting forum and a customary court in rural Botswana. It plays a key role in resolving disputes and making community decisions, reflecting its deep roots in Setswana culture (Gwokto, 2025, pp. 3–4). The government of Botswana formally recognizes the Kgotla as the preferred forum for settling minor disputes—those involving crops, debts, or family disagreements—rather than relying solely on formal courts (Government of Botswana, 2025, p. 1). Its continued relevance is attributed to its efficiency, emphasis on reconciliation and consensus, and strong community participation.

4. Indigenous Peacebuilding in Practice: Global Adoption and Outcomes

The concepts of African indigenous peacebuilding are not specific to the continent. Around the world, societies that have had to overcome the constraints of formal legal systems or the traumas of historical injustice have resorted to indigenous and community-based practices. The consequences, as experienced in Canada, New Zealand, and Colombia, have been remarkable.

Canada: The Truth and Reconciliation Commission

The history of Canada and its Indigenous peoples have been marked by decades of dispossession, forced assimilation, and cultural erasure faced by the Indigenous people, most infamously through the residential school system. In a bid to address this heritage, the Canadian government created the Truth and Reconciliation Commission (TRC) in 2008. Particularly noteworthy was the integration of traditional practices—such as healing circles, storytelling, and the testimony of elders—with formal legal proceedings (Berman, 2019, p. 54). This hybrid approach brought together culturally resonant reconciliation methods and the structure of official justice, fostering outcomes that neither system could achieve on its own.

The impact of the TRC was significant. It provided survivors with a platform to share their experiences and allowed the nation to bear witness, fostering restorative interactions that exceeded the capacities of conventional courts. Reported evaluations suggest a substantial

increase in institutional trust among participating Indigenous communities alongside reductions in interpersonal violence in communities that engaged with the process (Lubasi, 2022, p. 28).

Colombia: Indigenous Jurisdictions and Peace Accords

The long civil war caused profound harms in Colombia, particularly in areas with high Indigenous population shares. The peace agreement of 2016 acknowledged the independence of Indigenous communities to settle their disputes based on their traditional approaches, within the broader context of Colombian law (Anderson, 2022, p. 47). Consensus-based councils and reconciliation rituals rooted in centuries-old traditions are among the means of settling disputes among the Nasa and Wayuu peoples. Post-accord evaluations suggest that rates of reoffending for certain violent crimes were notably lower in districts with established Indigenous jurisdiction than in adjacent districts without this integration (Anderson, 2022, p. 17). This case highlights the preventive and restorative possibilities of indigenous justice, especially where it is granted space, legitimacy, and support from state systems.

5. Indigenous Systems: Strengths, Gaps, and Mechanisms of Peace

The indigenous systems, as have been described, have strengths and weaknesses (or gaps). While some of these strengths and weaknesses are intrinsic to systems, others are seen when the mechanisms of their application are considered. Indeed, some of the limitations of the indigenous systems arise in relation to the peculiarities of the formal court system as would be seen.

5.1. Strengths and Diversity in Practice

Zambia's landscape of indigenous peacebuilding is rich and varied, encompassing systems such as the Lozi Kuta, Bemba Icibwela, Ngoni Inkhosi, Tonga Bukata, Lunda Rotational Eldership, and Bisa Chisungu gatherings. The procedures and roles of each system are described in Section 3. What is worth emphasizing here is the breadth of their mandate: beyond land and family conflicts, these community-rooted processes address water access disputes, inter-generational resource allocation, marital breakdown, accusations of witchcraft, youth misconduct, and community mental health crises—covering, in short, much of the social fabric that formal courts are poorly placed to reach (Okech, 2022, p. 13). Their adaptability to urban life, their inclusivity, and their focus on restoration rather than punishment make them invaluable assets for a society facing rapid demographic change and mounting psychosocial pressures.

5.2. Inclusivity, Urban Adaptation, and Contemporary Challenges

Women and youth play active roles in these forums, serving as mediators, truth witnesses, messengers, observers, and apprentice mediators—roles that are formally defined within each tradition rather than incidental. This engagement ensures generational continuity, enhances gender sensitivity, and legitimizes council decisions (Okech, 2022, p. 47). Youth participation equips young people with mediation skills, civic awareness, and leadership experience, fostering long-term social cohesion.

Urbanization has prompted further adaptation of these systems. Community-based forums modeled on rural traditions have emerged in Lusaka's Kanyama and Chawama neighborhoods, mediating local conflicts, market disputes, and petty theft. These urban adaptations integrate oral traditions with written agreements, maintaining cultural relevance while ensuring

procedural recognition for official purposes when necessary (Ntakirutimana and Niyibizi, 2024, p. 38; UNHCR, 2024, p. 19).

Despite these strengths, several gaps constrain the full potential of indigenous systems. A primary limitation is the lack of documentation and formalization: most case records remain oral, undigitized, and largely inaccessible for research or policy formulation (OECD, 2020, p. 43; Field Data, 2025, p. 28). This restricts visibility, prevents systematic evaluation, and hinders integration into broader governance and justice frameworks.

Between 2018 and 2023, the University of Zambia experienced eight major student riots (five of which turned violent) driven by delayed bursary payments, poor living conditions, and perceived administrative opacity (Msila, 2025, p. 60). Traditional preventive forums, such as the Lozi Kuta grievance councils, could provide early-stage dialogue to address grievances before escalation (OECD, 2020, p. 34; Msila, 2025, p. 61).

Similarly, rising student suicides at the University of Zambia—reported cases nearly doubled from 14 to 29 annually between 2015 and 2023 (Field Data, 2025, p. 22)—underscore gaps in early psychosocial intervention. Contributing factors include academic pressure, social isolation, stigma, and mental illness. Indigenous processes, such as the Bisa Chisungu reconciliation gatherings, offer youth opportunities to express concerns, seek elder guidance, and access social support networks (Anderson, 2022, p. 47). When adapted for urban or campus contexts, these mechanisms could serve as preventive platforms to alleviate isolation and emotional distress before escalation into crisis (Msila, 2025, p. 58).

Finally, the limitations of the formal justice system exacerbate these challenges. Courts are often slow, adversarial, and inaccessible, particularly for rural populations. The weakening of traditional peace forums diminishes early-stage conflict resolution capacity, leaving communities more vulnerable to disputes and unrest.

5.3. Why These Proceedings Reduce Violence: Two Mechanisms

The evidence presented in this essay points to two distinct mechanisms through which indigenous peacebuilding proceedings reduce violence and conflict.

The first mechanism is direct conflict resolution. By providing an accessible, culturally legitimate forum for early-stage disputes, these proceedings resolve grievances before they escalate into violence, prevent new conflicts by establishing clear community norms around disputed resources, and preempt cycles of retaliation through binding public resolutions. The documented reductions in land-related violence in Western Province and in revenge killings in the Acholi sub-region are best understood through this lens: specific disputes were heard, resolved, and closed before they could generate further harm.

The second mechanism is attitudinal and normative change. Every session is a public event attended not only by the parties but by witnesses, youth observers, uninvolved community members, and spectators. This audience observes a peaceful, ordered process for managing harm—elders deliberating, grievances voiced without violence, agreements reached through dialogue. Over repeated exposure, this models an alternative to violent self-help and reinforces the community's shared expectation that disputes should be handled through council rather than force. Youth who participate as messengers or observers internalize these norms as part of their civic formation (Field Data, 2025, p. 15; Uganda Amnesty Commission, 2016, p. 27). Together, these two mechanisms explain why the presence of active indigenous forums correlates not only with lower rates of specific conflicts but with broader reductions in community violence.

5.4. Comparative Differences Across Systems

The traditional peacebuilding practices among indigenous cultures across Africa represent a rich repertoire with historical roots spanning generations. Although these traditions are culture-specific, they share core values that differentiate them from mainstream Western justice traditions. Important distinctions also exist in structure and functions, reflecting historical context, social norms, and scope within national law.

Level of Formalization

The extent to which these systems are recognized by national legal frameworks varies considerably. Rwanda's Gacaca courts were established as a formal legal response to genocide, operating alongside the state justice system (Clark, 2010, p. 85). New Zealand's Rangatahi Courts, which operate within Māori cultural frameworks, are formally recognized within the national justice system (Jones, 2020, p. 62). In contrast, in Zambia, systems such as the Lozi Kuta, Bemba Icbwela, and Tonga Bukata operate in parallel with the official legal system and remain largely undocumented in formal legal frameworks (Okech, 2022, p. 39).

Inclusion Mechanisms

Procedures for inclusion—particularly regarding gender and youth—also differ. Some traditions, such as the Tonga Bukata system in Zambia, clearly define roles for women and youth as mediators, witnesses, and speakers, actively promoting inclusivity (Okech, 2022, p. 44). Women may serve as truth witnesses, while youth participate as messengers and observers, gaining practical mediation skills through participation. Conversely, other systems still reflect patriarchal authority structures, with decision-making concentrated among elder men and limited roles for women and youth (Boege, 2011, p. 37).

Hybridization

A further distinction lies in the degree of "hybridization," or integration with formal justice systems. Canada and New Zealand have deliberately blended indigenous and state justice practices, resulting in hybrid systems that draw on the strengths of both approaches. This blending fosters cross-fertilization and can enhance both efficiency and relevance (Berman, 2019, p. 54; Jones, 2020, p. 66). In contrast, in Uganda and Zambia, indigenous systems function as parallel justice mechanisms—respected and sometimes consulted but not formally integrated into the state justice system (Okech, 2022, p. 49).

Table 1 compares the impact of various indigenous justice systems on reducing violence across five countries. It shows declines in conflict forms, such as intercommunal violence, revenge killings, and youth reoffending. Rwanda's Gacaca Courts, for example, demonstrate the highest reduction (~63%), while New Zealand's Rangatahi Courts show a more moderate decrease (~16%). Overall, the data suggest varying degrees of improvement in social stability and conflict resolution attributable to local justice mechanisms.

Table 1. Comparative Crime Rate Reductions Following Indigenous Peacebuilding Implementation

Country	Indigenous System	Crime Type Measured	Rate Before Implementation	Rate After Implementation	% Reduction (reported)
Rwanda	Gacaca Courts	Intercommunal violence (per 10,000)	22	8	~63%
Uganda (Acholi)	Mato Oput	Revenge killings (per 100,000)	5.8	3.3	~43%
New Zealand	Rangatahi Courts	Youth reoffending rate	31%	26%	~16%
Canada	TRC healing circles	Interpersonal violence (per 10,000)	14	11.3	~19%
Zambia (W. Province)	Lozi Kuta	Land-related violence (per 10,000)	7.1	4.4	~38%

Note: Figures drawn from field evaluations and government reports cited in text; percentage reductions are approximate.

6. Bridging Indigenous and Modern Justice: Peace Education and Youth Engagement

6.1. Peace Education and Prevention

Despite Zambia’s rich indigenous heritage, the formal education system has been slow to adopt peace education as an essential component. Currently, peace education is absent from the national primary and secondary school curriculum. Where civic education exists, it primarily focuses on abstract legal standards and constitutional principles, rather than imparting practical skills for conflict transformation, negotiation, and community building (Okech, 2022, p. 39). Without structured exposure to the values and practices of indigenous peacebuilding, students graduate ill-equipped to handle conflicts proactively. This gap is particularly pronounced in urban settings, where young people are more likely to encounter conflicts not addressed by the formal justice system (Ntakirutimana and Niyibizi, 2024, p. 42).

Research and field evidence indicate that youth participation in violence is significantly lower in communities where indigenous mediation forums are active (Field Data, 2025, p. 24). Quantitative modeling suggests that if peace education rooted in indigenous practices were implemented nationwide, Zambia could see a meaningful decrease in youth violence over the next decade (Okech, 2022, p. 45). In Rwanda, the introduction of Unity and Reconciliation Studies at the primary level reinforces the values underpinning the Gacaca system, fostering empathy, tolerance, and peaceful conflict resolution (Mukamunana, 2021, p. 53). Kenya’s Peace Education Programme, introduced in 2008, led to measurable reductions in school violence and ethnic bullying (Okech, 2022, p. 47).

Both countries demonstrate that peace education, when grounded in local realities and delivered through the school system, can be transformative. For Zambia, it is essential to design a curriculum drawing from indigenous traditions—such as Bukata, Kuta, and Chisungu gatherings—while adapting these practices for classroom delivery. Strategies such as simulating council sessions, role-playing, and storytelling can teach students how to voice grievances, listen actively, and negotiate equitable solutions (Ntakirutimana and Niyibizi, 2024, p. 38).

6.2. Youth, Violence, and the Preventive Role of Indigenous Systems

Zambia's large and youthful population faces significant risks of political mobilization toward violence. Recent trends reveal that youth are frequently enlisted for political violence, particularly during election periods in major cities (Namulele, T., 2022, p. 42). According to Zambia Police Service arrest statistics, a substantial majority of those involved in political violence between 2018 and 2023 were aged between 18 and 30 (Namulele, T., 2022, p. 45).

Despite these negative trends, youth involvement in violence is not inevitable. In provinces where traditional councils remain active, youth participation in violence is significantly lower. Indigenous systems purposefully engage young people in meaningful roles: as messengers responsible for delivering formal summons and carrying resolutions to affected households; as observers learning the conduct of proceedings; as junior mediators who participate in dialogue under elder guidance; and, in some traditions, as spokespersons who represent generational perspectives before the council (Field Data, 2025, p. 13). The Bemba *Icibwela*, Ngoni *Inkhosi*, and Tonga *Bukata* all assign specific, formally recognized functions to youth participants—they do not merely watch, they act (Okech, 2022, p. 44). These experiences constitute a form of civic apprenticeship, equipping youth with practical skills for future leadership, mediation, and peacebuilding.

This early, inclusive participation offers tangible benefits. By learning through example, young people acquire skills in dialogue, compromise, and empathy, making violent conflict resolution less appealing. Field research indicates that youth engaged in indigenous mediation processes are significantly less likely to participate in protests or violent criminal activities (Field Data, 2025, p. 15). In the Acholi sub-region of Uganda, youth who participated in *Mato Oput* ritual training were notably less likely to engage in revenge attacks compared to their peers (Uganda Amnesty Commission, 2016, p. 27). Likewise, peace clubs in Kenyan secondary schools reduced reported cases of ethnic bullying markedly over five years (Okech, 2022, p. 51).

7. Modern Justice Integration: Hybrid Models and the Path Forward

7.1. Complementary Pluralism in Practice

The interaction between indigenous and formal justice systems in Zambia can be understood through the lens of complementary pluralism. Rather than competing, these systems function as partners addressing different levels of conflict (Boege, 2011, p. 37). Indigenous systems excel at early intervention, prevention, and restoring relationships, whereas formal courts provide adjudication for severe, complex, or unresolved cases. In practice, traditional councils handle issues related to land, families, markets, and minor offenses through dialogue and consensus, achieving restorative outcomes. Formal courts become involved when statutory laws are breached or where constitutional protections, due process, and enforceability are required.

The effectiveness of this dual approach is evident globally. Rwanda's *Gacaca* courts operated alongside the formal judiciary, adjudicating community-level genocide cases while national courts addressed high-profile matters (Clark, 2010, p. 85). New Zealand's *Rangatahi* Courts cater to Māori youth within their cultural context, complementing mainstream youth courts (Jones, 2020, p. 62). In Canada, Indigenous healing circles have been used in sentencing and rehabilitation, contributing to restorative outcomes (Berman, 2019, p. 54). These hybrid models have accelerated justice delivery, enhanced reconciliation, and reduced reoffending.

7.2. The Path Forward

Effective integration requires formalizing the role of traditional councils within the broader justice system. This could involve establishing legal instruments recognizing councils as first-instance mediators for specific disputes, with agreements registered at local magistrate courts to ensure both social legitimacy and legal enforceability (OECD, 2020, p. 23). Digitizing and systematizing outcomes would improve visibility and facilitate research, monitoring, and policy development. Partnerships among the judiciary, educational institutions, local government, and civil society could provide training, resources, and oversight, ensuring indigenous systems remain dynamic, inclusive, and accountable.

8. Recommendations

- Integrate Peace and Conflict Resolution as a mandatory subject from Grade 5 onwards; revise teacher training curricula to include peace pedagogy; establish Peace Clubs and Student Parliaments in all secondary and tertiary institutions.
- Formally recognize and adequately fund traditional councils, establishing legal instruments that recognize councils as first-instance mediators for defined categories of disputes.
- Develop hybrid courts to bridge customary and statutory law, modeled on the Rwanda Gacaca and New Zealand Rangatahi experiences.
- Provide legal and human rights training to traditional leaders to ensure indigenous proceedings respect constitutional protections.
- Digitize and systematically document indigenous systems for education, research, and policy development.
- Launch a National Youth Leadership Academy focused on mediation, civic literacy, and innovation.
- Ensure that all public universities employ trained counselors, run regular mental health awareness campaigns, and develop robust peer support networks.
- Introduce regular mental health campaigns including workshops, seminars, and outreach activities to educate students about mental health and encourage help-seeking behaviors.

Recommendations for Further Study

- Conduct longitudinal studies on the effects of integrating indigenous peacebuilding with formal justice and education systems on youth violence, mental health, and social cohesion.
- Explore how indigenous mechanisms can be effectively adapted and scaled in urban and peri-urban settings, especially among youth.
- Investigate the specific roles and impact of women and marginalized groups within indigenous conflict resolution frameworks.
- Assess best practices for digitizing indigenous justice processes and making their outcomes accessible for policy, education, and community use.
- Evaluate the effectiveness of culturally grounded, community-based mental health interventions in reducing stigma and supporting youth well-being.

9. Conclusion

This essay has demonstrated the urgent global need for a comprehensive transformation of peace and justice systems, particularly in the context of challenges such as youth unrest, mental health crises, and increasing social fragmentation. Across Africa and around the world, the marginalization of indigenous justice traditions, inadequate peace education, and the politicization of youth have all contributed to the weakening of social cohesion.

Evidence from Zambia, other African countries, and international contexts highlights that indigenous peacebuilding approaches are not only culturally meaningful but also highly effective in reducing violence—operating through two distinct mechanisms: direct conflict resolution, and the gradual attitudinal and normative change that arises from communal participation in peaceful proceedings. When integrated with modern legal frameworks and incorporated into educational and youth development initiatives, these systems offer powerful tools for conflict prevention and sustainable peace.

Adopting a holistic and inclusive approach that values traditional practices, emphasizes prevention, and empowers young people can transform the peace and justice landscape in Zambia and serve as a model for Africa and beyond. By embracing such an approach, societies can advance accessible justice, improved mental health, and a resilient sense of unity at both national and global levels.

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Deep Dive Into Livestock Rustling: An Illicit Revenue Stream Fueling Under-Development, Animal Abuse and Terrorism in Nigeria and the Lake Chad Basin

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Abstract: This research paper explores the pervasive issue of livestock rustling in Nigeria and the Lake Chad Basin, highlighting its profound implications for underdevelopment, animal welfare, and terrorism. It investigates the historical context and evolving nature of cattle rustling, transitioning from traditional practices to modern organised crime fuelled by economic desperation, climate change, and political instability. The proliferation of criminal armed gangs, herder-farmer conflicts, and the Boko Haram insurgency all contribute to the resurgence, creating a volatile security landscape. Traditional perceptions of cattle rustling among Fulani herders as a display of bravery are juxtaposed against the violent realities of modern rustling, driven by criminal elements using diabolical means. The analysis reveals how the Boko Haram insurgency has exacerbated the issue, with the group leveraging cattle rustling as a means of funding and control in the region. Through empirical data, the paper reveals the complicated relationship between cattle rustling and illicit financial flows, underscoring the economic ramifications of this crime. This significantly contributes to regional insecurity and hampers efforts to achieve the Sustainable Development Goals. The paper identifies key actors in the livestock rustling network, including cattle rustlers, intermediaries, and buyers, and delineates the socio-political complexities surrounding the issue. These include the involvement of foreign Fulani migrants and the implications of weak law enforcement. The findings illustrate the systemic violence associated with rustling, including the abuse of livestock and the socio-economic devastation faced by affected communities. The paper concludes with recommendations for policy reforms and collaborative security measures.

Keywords:

1. Livestock Rustling
2. Terrorism
3. Animal abuse
4. Illicit Financial Flows
5. Nigeria
6. Lake-Chad Basin

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1. Introduction

Livestock production is an important component of the agricultural sector. In Nigeria and around the Lake Chad Basin, it supports both rural and urban economies. This thriving industry is under threat due to the activities of rustlers. Historically, livestock rustling in the region has been associated with the cultural practice of pastoral groups. In recent times, it has evolved into an illicit financing enterprise for bandits, and terrorists who leverage small arms and light weapons proliferation, unemployment, and weak border control across the region to perpetrate their activities. While animals suffer abuses, affected communities suffer loss of livelihoods, food insecurity, forced displacement, poverty, and underdevelopment. Figure 1 shows a young armed herder, illustrating the militarization that increasingly accompanies livestock rustling in the region under study.



Figure 1. Picture of a young herder armed with a rifle (The New Humanitarian, 2007).

Since Illicit Financial Flows (IFFs) through rustling threaten security, social cohesion, economic stability, and the actualization of the Sustainable Development Goals (SDGs), this paper will examine my personal motivation behind this comprehensive research, define some terminologies, explore the history of rustling, discuss the motive behind the menace, state the methodology used, and give reasons why a study on rustling is necessary. It will also discuss the motives behind Boko Haram's involvement in the menace, consider the financial losses, explore the major perpetrators and mechanisms involved, examine how animals are abused, cite reasons why the practice persists, and recommend some reform proposals.

2. Personal motivation to explore the topic

After graduating from the university, I embarked on the National Youth Service Corps, a one-year scheme designed by the Nigerian government to encourage young graduates under 30 to serve the country. The purpose of the scheme is primarily to inculcate in Nigerian Youths the spirit of selfless service to the community, and to emphasize the spirit of oneness and brotherhood of all Nigerians, irrespective of cultural or social background (National Youth Service Corps, n.d.) As fate had it, I was posted to Katsina State in Northern Nigeria (See Fig. 2), where insecurity was at its peak.

‘Not at all, my son won’t be the victim of Boko Haram, rustlers, or bandits. You will have to reject that posting and relocate to a safer state closer to home,’ said my mom.

‘No, Mum, I have made up my mind to serve my fatherland even if it is in Northern Nigeria,’ I replied. This left her in tears as I left for the motor park to embark upon this dangerous trip.



Figure 2. Picture of Katsina State, Northern Nigeria. Picture by Ekoja Okewu Akor.

As we proceeded, we passed through different landscapes and vegetative belts. Further into the voyage, as we approached the Sahara Desert, the region gradually became drier and dustier, and the absence of trees made visibility for kilometres ahead unobstructed. Upon arrival, I noticed that the climate was very dry, dusty, and sunny. This was at variance with that of my state of origin. Yet, I resolved to contribute my quota to the development of my adopted community.

After settling down at a temporary abode, great darkness accompanied by a sense of fear breezed in as I settled down for a night's rest. The sudden, thunderous sound of gunfire woke me from sleep. ‘This must be the announcement of the arrival of armed men!’ I exclaimed. With tension around, thoughts of escape through the ceiling or into a nearby bush came knocking, but the fear of a stray bullet hitting me would not permit me to fulfil them. With my heart racing, I got up in haste to view what was going on. Police vehicles moved to control the situation on the ground. Minutes later, news filtered in that bandits who specialized in carting away livestock were the august visitors in town.

As the cock began to crow, bulls were yoked for the day's farm work while calls for the Muslim prayers were offered over the conical Ahuja speaker on the mosque tower. As kettles

swung from hand to hand at ablutions' peak, the faithful congregated to make petitions to Allah for the security of the land.

After reporting to my place of primary assignment as a class teacher, I taught over 300 students in agriculture and computer studies. While I stood in the classroom delivering my lesson, some learners ran for cover. Confused over the situation, I summoned the courage to enquire, as their security rested on me. 'Mallam! Mallam! Yan fashi suna kusa' (Teacher! Teacher! 'Bandits are around'), said Amira, a teenage female student in my class. Her response jolted me, sending shivers down my spine. This group of people has been inflicting harm on the people in northern Nigeria for decades. When they attack a community, countless livestock will be rustled from poor rural animal farmers, with the proceeds used to buy weapons and recruit more followers. This clique has been a driving force behind the escalating state of insecurity around the Lake Chad region.

'How do I escape this trouble?' 'Maybe I should jump through the window,' I said to no one in particular. I summoned courage and asked my students to remain calm. Just like the good shepherd in Psalm 23, whose sheep do not lack and are protected, I must protect these young Nigerians who have found themselves in a situation they never wished nor prayed for. After observing the school surroundings, I returned to the class to calm the nerves of my perplexed students.

Although I am currently democratizing education as a mathematics teacher in geographically disadvantaged schools across Nigeria, my storytelling draws many learners and colleagues to my table during break periods to discuss about rustling, insecurity, and animal poaching.

During an interactive chat with a teaching colleague of mine, she told me that for years, she hasn't visited her village. When I prompted to know why, she said that over the last few years, armed men who rustle livestock, kidnap farmers, and steal farm produce have disrupted the peace of her community. This has caused villagers in her community, who are the predominant producers of yams, to flee for safety to the Internally Displaced Persons Camps scattered across Nigeria. It has hampered food security, stalled development, and facilitated the illegal movement of funds across borders among criminal gangs.

3. Definition of terms

Livestock or cattle rustling is defined as the stealing or planning, organizing, attempting, aiding, or supporting the stealing of livestock by any person from any country or community where the theft is accompanied by dangerous weapons and/ or violence (Abdul & Aliyu, 2017). It is increasingly becoming a very large-scale organized criminal gang activity where marauders move in their hundreds armed with sophisticated weapons to attack their victims and carry away their cows and other animals. The ruthless manner with which these cattle rustlers carry out these raids often leaves behind fatality, burnt houses, and wanton destruction of property (Olaniyan & Aliyu, 2016).

Illicit Financial Flows (IFFs) are illegal movements of money or capital from one country to another for various reasons. By definition, this refers to funds illegally earned, transferred, or utilized within a country and across international borders, or money legally earned but moved wrongfully (Independent Corrupt Practices and Other Related Offences Commission. n.d.).

4. Literature review

4.1. History of Cattle Rustling and its Evolution

Rangers and Osborne (2006) stated that over 7,000 years ago, livestock attacks were reported to have taken place. The Greek historian Herodotus reported livestock raiding by Scythian equestrians 2,500 years ago (Egwu, 2015:21).

Furthermore, in the American Old West, Mexican rustlers were a major concern during the American Civil War from 1861 to 1865. Likewise, Texans stole cattle from Mexico, swimming them across the Rio Grande; these cattle were called 'wet stock' (Egwu, 2015:22). Conflict over alleged rustling was a major issue in the Johnson County War, 1892, in the U.S. state of Wyoming (Weiser, 2021). Cattle rustling, however, became a source of concern at the end of the 19th century in Argentina, where cattle stolen during Malone's were taken through Rastrillo de los Chilenos across the Andes, where they were swapped for alcoholic drinks and firearms in Chile (Cattle raiding, 2022).

Coming down to Africa, cattle rustling among the Pokot of Kenya dates back to the 17th century when the Maasai roamed about with their livestock in Baringo (Julius, 2014). According to Triche (2014), 'Livestock raiding has been a source of conflict amongst and between pastoral societies for hundreds of years.' Pastoral communities raided each other as well as sedentary communities for livestock, mainly to replenish their herds depleted by severe droughts, disease, raiding or other calamities (Adan and Pkalya, 2005:16). Today, numerous pieces of literature pointed to the transformation of cattle rustling from petty theft and cultural practices into an organized crime (Maluleke, 2020; Gumba, 2020; Olaniyan et al., 2016).

In Nigeria and the borders of the Chad Basin, rustling is as old as pastoralism and was a traditional practice among the Fulani pastoralists. Their transhumance lifestyle ensured they moved from place to place as dictated by rainfall and pasture availability. The intention and dynamics of rustling remain traditional, primitively guided and regulated by the sanctity of culture and tradition of the Fulani pastoral communities. Cattle rustling among Fulani pastoralists, for instance, is regarded as a socio-cultural practice for exhibiting bravery, perseverance, and prowess regulated and sanctioned by their elderly kinsmen (Josiah 2000). Cattle rustling during the primitive days was localized, seasonal, customary, and non-militarized, using traditional spears with less associated violence (Olaniyan & Yahaya, 2016). Even child teenagers among pastoral communities are obliged to embrace not only skills and bravery required for pastoralism but also to develop the courage and enthusiasm to aggressively defend their herds from raids and attacks (Ahmadu & Ayuba, 2018). The practice also promoted cultural bravery and warrior tradition, generational contests, and unforgiving revenge-seeking ventures of the Fulani tribe. (Olaniyan & Yahaya, 2016). This helped in creating healthy competition among members of the Fulani tribe.

From the account of Ardo Nyori, an 82-year-old Fulani pastoralist:

Cattle rustling during the traditional days takes place at unique periods, especially after circumcision rites of young teenagers must have been completed, marking the age of their maturity. Newly inducted young men will have to engage in raids for purposes of not only fulfilling the traditional rites but also preparing them in terms of bravery and prowess. On the contrary, rustling is militarized using sophisticated weapons accompanied by violent brutality, killings, kidnapping, rape, and other nefarious atrocities that are inconsistent with extant traditional values of our people (Ahmadu Hamman, 2019).

In modern times, however, livestock rustling is now a major crime in the Northern region of Nigeria due to the infiltration of criminals, terrorists, and militias. The activities of these criminal elements have led to the theft of much livestock, the death of farmers, and the destruction of property worth millions of dollars. More devastating in our contemporary time is the link between cattle rustling and terrorism. The involvement of 'Boko Haram' terrorists in cattle rustling has been economically motivated to improve their financial strength. For these terrorists to fund their deadly activities, they rely on proceeds gotten from the sale of rustled cattle (Ogbeche, 2016, cited in Olaniyan & Yahaya, 2016). It has also become a significant illicit economy that finances armed groups and contributes immensely to the growing instability of food security.

4.2. Factors responsible for cattle rustling in Northern Nigeria and the Lake Chad Basin

The resurgence of cattle rustling and violence has been attributable to developments such as the proliferation of criminal armed gangs, armed banditry, Fulani herder-farmer conflicts, and the Boko Haram insurgency. All these have exacerbated the problem of cattle rustling as one of the causes of national security disequilibrium in recent times (Daily Trust, 2014; Ekekwe, 2015; Olaniyan & Yahaya, 2016).

A traditional cause of cattle rustling among Fulani herders in Nigeria, and Borno State in particular, is that it was regarded as a show of wit among some of them. For those who are engaged in it, it is a show of bravery when they can steal cows and make away with them without being caught. Though a negative aspect of the Fulani culture undertaken by criminal elements, cattle rustling remains a vexed security problem and a most volatile source of violence. The criminal elements among the Fulani herders engaged in cattle rustling often employ diabolical means to ensure smooth and successful operations (Bello 2013; Bashir 2017).

Another cause of cattle rustling in the Lake Chad region is the rise of the Boko Haram insurgency, where some herdsmen are classified as Boko Haram collaborators by the Nigerian military and politicians.

This illustrates the increasingly complex conflicts between sedentary farmers and cattle breeders in various regions. Investigating the transnational and multifaceted causes is necessary, as is the politicization of the issue of cattle rustling with the alleged involvement of camel pastoralists from the Republic of Niger in shipping weapons and ammunition to Borno State for the Boko Haram insurgents.

Although the cattle eat agricultural waste, the once symbiotic relationship between Fulani herders and farmers, which included the provision of manure on arable land, access to local markets, and the commercial exchange of dairy products for grains, has been significantly disrupted. Additionally, the actions of foreign Fulani migrants from the Niger Republic and the larger Sahelian-Maghrebian regions of North Africa have shattered the once peaceful religious and cultural links amongst Nigeria's indigenous Fulani herders. During the 2011 Libyan crisis, the majority of these migrant foreign pastoral Fulani herders were either direct or indirect armed mercenaries or militias (Courtright, 2025).

The laissez-faire attitude of the Nigerian government towards restricting the entry of these migrant Fulani herders to Northern Nigeria and Borno State, in particular, has resulted in the growth of cattle rustling and other violent activities in the state (Adekunle & Solagberu, 2010).

Other causes of cattle rustling, such as trespassing on traditional cattle routes, climate change, the rise of agropastoralism, and the expansion of pasture farming, as supported by

some academics, are not supported by science and cannot, therefore, be trusted. According to some scholars, factors such as cattle invading farmlands, herders attacking non-Fulani women, freshwater scarcity, and bush burning cannot be the cause of cattle rustling; instead, they may contribute to conflicts or violence in Borno state (Bello 2013; Adegboyega & Saleh, 2017).

5. Methodology

This research is largely based on information from reputable secondary sources such as textbooks, journals, newspapers, and magazines. It does not overcome these sources' lack of reliable and precise quantitative data, specifically about the magnitude of the illicit financial flows (IFFs) related to rustling, which takes place in rural areas and is often left unreported.

6. Why is a research paper on Illicit Financial Flows through livestock rustling necessary?

What makes this work important is that from 1980 to 2018, for instance, sub-Saharan Africa lost a staggering \$1.3 trillion to these flows (Signé, Sow & Madden, 2020), highlighting the scale and persistence of the problem. An article by the Africa Program and the Global Order and Institution Program, under the auspices of the Carnegie Working Group on Reimagining Global Economic Governance, reports that Africa's annual losses due to IFFs total around \$88.6 billion, representing 3.7 percent of its GDP (UNCTAD, 2020), a severe leak in its economic bucket that exacerbates inequality and stifles growth.

A Global Initiative against Transnational Organized Crime (GI-TOC's) West Africa illicit hubs mapping initiative study recently revealed that cattle rustling is driving insecurity. This was confirmed when 280 hubs of illicit economies across 18 countries in West and Central Africa were identified and studied. In each hub, the study applied the Illicit Economies and Instability Monitor (IEIM), a tool designed to assess the relative impact of the role played by illicit markets in fuelling conflict and instability. The result from the research showed that cattle rustling emerged as one of three accelerant markets – alongside arms trafficking and kidnapping for ransom (Bird & Tagziria, 2022).

Cattle rustling in Africa results in substantial economic losses, with estimates suggesting annual losses of at least US\$27 million in East Africa (Bunei, McElwee, & Smith, 2016). In the past five years, an average of 1,600 cattle valued at more than E7-million have been rustled within eSwatini, while some 8,083 cattle have been moved across the eSwatini border with Mozambique and South Africa (Inhlase Centre for Investigative Journalism publication, 2021). The problem of cattle rustling also affects other West African countries, with Mali experiencing annual losses of USD 32 million between 2016 and 2022. Senegal experiences a USD 3.2 million loss annually. According to Dr. Lionel Gbaguidi, Animal Health and Production Officer at FAO's Sub-regional Office for West Africa, annual losses due to cattle rustling are estimated at USD 432 million in Nigeria between 2016 and 2022 (FAO Regional workshop on cattle rustling in West Africa and the Sahel, 2024).

7. Understanding the geography of Nigeria, Lake Chad Basin and adjoining borders

Nigeria is located on the west coast of Africa and is the most populous Black country in the world, bordering the North Atlantic Ocean, between Benin and Cameroon. Nigeria covers 356,668 sq. miles (923,770 sq. kilometres), and it's about the same size as California, Nevada, and Utah combined. Nigeria is diverse in people and culture. The history of the country goes back to 500 BC, when the Nok people were the inhabitants. It was at the end of the 15th century

that European explorers and traders began their lucrative slave trade with the Yoruba and Benin people. In 1861, the British colonised Lagos, and by 1914, the entire country became the Colony and Protectorate of Nigeria. Nigeria became independent in 1960 (Nigeria Embassy in Germany, n.d.). Figure 3 illustrates the geographical location of Lake Chad and the surrounding countries discussed in this research paper.



Figure 3. Map of Lake Chad and bordering countries (Wikimedia Commons, 2013).

The Nigeria-Niger border plays an important role in the pastoral system in Africa. The 1600-kilometre-long border runs through a zone of semi-arid savannah. Communities in the region share a similar history, culture, language, and family ties. This makes cross-border movement of livestock a seamless activity. In the Maradi region of the border, terrorists, bandits, and rustlers operating in Nigeria cross the border at night on motorcycles to rustle animals before retreating to the Baban Rafi Forest and other adjoining vegetation for safety.



Figure 4. Picture showing the shrinking of Lake Chad (1963–2024) (TDH [The Dragon Historian], 2024).

The Lake Chad basin, situated in Northern Central Africa, covers almost 8% of the continent and spreads over seven countries, namely, Nigeria, Niger, Chad, Cameroon, Algeria, the Central African Republic, and Sudan (Food and Agricultural Organization, n.d.) Lake Chad is a vast area of fresh water located in the middle of dunes, which covers territories in four countries: Nigeria,

Cameroon, Niger, and Chad. The lake has been constantly evolving in response to the environmental conditions. Its geological variations as shown in figure 4, have been sparking numerous controversies lately, especially among farmers, anglers, and herdsman who rely on the lake for their livelihood. With resources in the form of pasture, fish resources, and water for irrigation becoming scarce, the concentration of pastoralist scrambling for water and grazing reserves expose them to terrorist groups operating in the region, who rustle to fund their activities (National Commission for Museums and Monuments, 2018).

8. Major causes of cattle rustling

8.1. Climate change

Climate change, which refers to long-term shifts in temperatures and weather patterns, is a leading cause of livestock rustling in the region (United Nations, n.d.) Due to the biting effects of climate change, Lake Chad, which has been sustaining the livelihood of millions, is becoming susceptible to desertification, land degradation, and water recession. This has created fierce competition over the available limited resources between farmers and pastoralists. With no alternative source of livelihood, people in the region seek alternative measures like rustling to make ends meet. This was the motivating factor that always made Nigeria's former president, Muhammadu Buhari, advocate for international support to restore the lake and mitigate future conflicts (S-Davies Wande, 2018).

8.2. Financial gains

Cattle are valuable assets, and with the exponential income one could generate from their illegal sale, many people are tempted to engage in rustling.

8.3. Availability of an unsatisfied black market

Due to the availability of a ready market for meat and leather, organized rustling networks are motivated to steal livestock indiscriminately for sale to unsuspecting buyers.

8.4. Social status

In Northern Nigeria, owning a large herd of cattle signifies wealth. This motivates young people to engage in rustling to sustain their social status.

8.5. Rising livestock prices

With the population increase in Nigeria and the accompanying inflation, the price of livestock is increasing daily. This has incentivized livestock theft within the Sahel region.

8.6. Political motives

An ENACT study reveals that during political seasons, corrupt politicians sponsor rustling activities to raise money for campaigns and discourage supporters of rival political figures from actively participating in the electioneering process (ENACT Observer, 2020).

8.7. Weak border and security systems

With the majority of pastoral activities taking place in rural areas where there are ungoverned spaces and porous borders, rustlers are given safe havens to perpetuate their illegal activities.

8.8. Weak legislation

Due to lax laws and insufficient punishments for rustling convicts, rustlers capitalise on deficiencies in the legal and market systems to profit from stolen cattle through deceptive practices like ‘cattle round tripping’ (Oluwole & Raoul, 2024).

8.9. Proliferation of illegal arms

The Small Arms Survey estimates that the worldwide tally of firearms exceeds one billion, with a substantial proportion being held by civilians (Global Firearms Holdings-Small Arms Survey, 2018). In West Africa, there is a paucity of current, accurate, and reliable data on the number of illicit arms in the hands of non-state actors due to conflicting data surrounding this matter. With the crisis in Libya and other Sahel regions stimulating the inflow of illegal arms through the porous borders around Lake Chad, more arms are getting into the hands of private individuals. According to the director of the UN Regional Centre for Peace and Disarmament in Africa, there are around 500 million illicit weapons in circulation in West Africa, and Nigeria accounts for over 70% of them (Premium Times News, 2016). With these inflows coinciding with electioneering periods, corrupt politicians leverage on this to arm youths to swindle results in their favour. The inability of these weapons to be retrieved tempts many of these abandoned youths to turn to rustling for survival.

9. Key perpetrators and supply chain in the Livestock rustling network

9.1. Cattle rustlers

These are the first set of actors in the livestock-rustling network. Check figure 5 which illustrates the supply chain and the major actors involved in the livestock rustling network. They are made up of ethnic militias, self-defense groups, jihadists, armed bandits, and opportunistic criminals. While each of these groups wields influence from geographical zone to zone, they serve a common purpose: to rustle livestock, destabilize the security architecture, and unleash mayhem on resistant livestock owners.

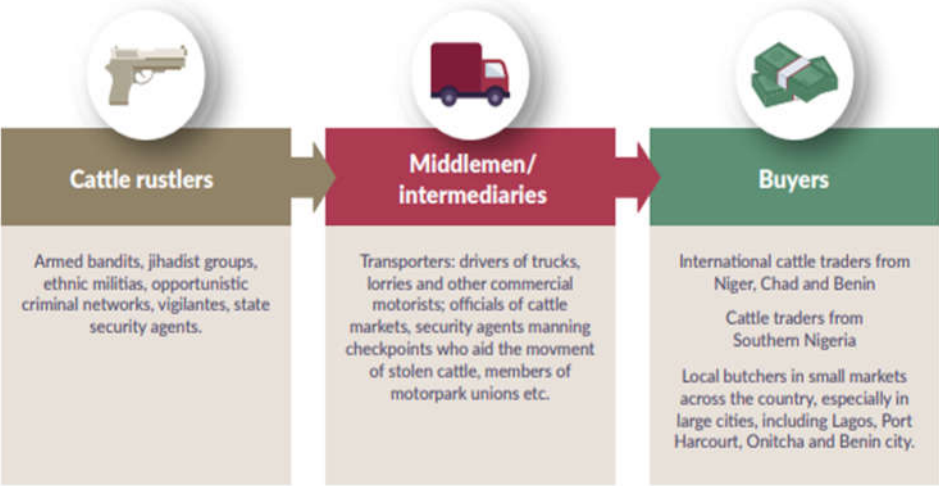


Figure 5. Chart showing the key perpetrators and supply chain in the livestock rustling network (Madueke, 2023, p.9).

According to their geographical distribution, armed bandits are the major actors domiciled in North West Nigeria. In the North Eastern part of the country, insurgents dominate the region, while the activities of ethnic militias and criminal networks, which have established dominance in the north central region, complete the network. For many of these rustlers, illicit financial flows obtained from this criminal venture are used to finance the procurement of arms and the sustenance of group members' loyalty.

9.2. Middlemen/Intermediaries

These are the second set of actors in the livestock rustling network, comprising groups that facilitate the sale of stolen livestock and the transporters who move the stolen cattle to markets in Southern Nigeria.

These intermediaries work with transporters who have a wide network of intermediaries that facilitate the movement and sale of stolen livestock illicitly in the market.

Some of these enabling intermediaries include corrupt Road Union workers, security agents operating checkpoints on major highways, cattle market officials, and security agents. On most occasions, when rustled animals, identified by distinct, often unnatural, differences in their physical identification marks, behaviour, and ownership documentation compared to legitimately managed are discovered in a truck, (Franklin County North Carolina Cooperative Extension, 2026) these enabling intermediaries are bribed to turn a blind eye.

9.3. Buyers

The final set of actors in the livestock-rustling network are the buyers who buy them for different purposes. These groups are divided into local and international buyers.

The local buyers are buyers who are domiciled within Nigeria. When rustlers rustle these livestock, local buyers like butchers, meat processors, and vendors buy these animals from markets that are near the point of theft. For crafty marketers who try to evade suspicion and gain greater profit from buyers, the rustled animals are transported to Southern Nigeria, where local buyers offer higher bids due to the unsatisfied demand for beef.

For the international buyers, they live in neighbouring countries like Benin, Cameroon, Chad, and the Niger Republic that share porous borders with Nigeria.

10. Why do rustlers focus on cattle?

One of the major reasons why rustlers focus on cattle is the large body size of the animal when compared to goats or sheep. This makes them a target for rustlers. Furthermore, while goats are stubborn and prone to wandering, cattle are easier to manage in large herds on open pastures. The less selective grazing habit of cattle is yet another. This makes it easier for them to be managed on large grazing pastures that characterize the vegetation around Northern Nigeria and the borders of the Lake Chad Basin. The large volume of meat, milk, and animal products that cattle produce is also a motivating factor. Although goat milk has nutritional advantages, cows produce higher volumes of milk during lactation.

Cattle are among the most expensive livestock in the region. At Abuja's Durumi livestock market and other major urban centres for instance, small cows were commonly priced between ₦500,000 and ₦600,000, while medium-sized animals sold for between ₦800,000 and ₦1 million. Large cows, particularly premium breeds such as Sokoto Gudali, were reported to be selling for as much as ₦1.5 million to ₦2 million (Essiet, 2026) This makes rustlers focus on cattle, considering the risky nature of the venture.

11. Products gotten from rustled livestock

11.1. Meat

This is the general term used to describe the edible portion of animal tissues and any processed or manufactured products prepared from these tissues (Brittanica, (n.d.). Meat processing). It's a good source of protein, vitamins, and minerals in the diet of human beings and comes in the form of beef, chevon, and mutton from rustled animals.

11.2. Milk

This is a white liquid food produced by the mammary glands of mammals (STORYMD Health Journeys, n.d.) Milks produced by goats, sheep, and cows are good sources of calcium, protein, and other important nutrients beneficial to human health. These products are also used in the food industry to produce cheese, butter, and baby food.

11.3. Pelts (Hides and Skins)

The terms 'hide' and 'skin' are often used as if they were interchangeable, but according to the British standard definitions, 'hide' is the raw skin of a mature or fully grown animal of larger kinds, e.g., cattle and horses, and also other large animals. 'Skin' is the skin of a mature or fully grown animal of smaller kinds, e.g., sheep, goats, pigs, reptiles, birds, and fishes, or of immature animals of the large species, e.g., calves and colts (Adem, M., 2019). These by-products gotten from rustled animals are valuable resources used for making shoes, bags, and belts.

11.4. Bone

Any of the pieces of hard tissue making up the skeleton in vertebrates (Wordplayslcom, n.d.) Bones obtained from rustled livestock can be used for the production of gelatine, glue, fertiliser, animal feed, ceramics, toothpaste, abrasives, and paints.

11.5. Wool

This is a natural fibre derived from the fleece of sheep, goats, camels, and rabbits (Braaten, 2005) Wool can be used to produce outerwear like coats, jackets, trousers, and garments usually suited for cooler climates. They can also be used for manufacturing car interiors, carpets, and insulation materials.

12. How animals are abused during rustling

With many animal abuse cases left unreported, it is difficult to estimate the exact number of animals that are abused globally. Statistics from some organisations, however, reveal that at least one animal is abused every 60 seconds (Sleight, Nyerges & McGinley, 2024). This figure may even be higher in the Lake Chad Basin region due to the presence of animal rustlers.

In this region, many herders use the daylight to guide their livestock to grazing pastures. When these animals return for rest at sunset after a long day's toil, rustlers attack in the dead of the night before forcing the animals to travel long distances across borders. In some situations, rustlers subject animals to poor handling without considering animal rights. For instance, rustlers use techniques like Anastasia to drug livestock and make them inactive during raids. This makes the animals inactive and speeds up quieter operations.

For others, they may decide to overload rustled animals into vehicles with limited carrying capacity. This subjects them to discomfort and suffocation during long hauls across the Sahel. Take a look at Figure 6, which presents an example of animal abuse, where a cow is transported in an inhumane manner.

In rare situations, rustlers physically attack livestock during raids, inflicting painful injuries and maiming them. To conceal rustling crimes, some rustlers keep rustled animals indoors for days without food. This is a form of animal abuse prevalent among rustlers. Sometimes, upon discovery that a rustled animal is sick and unable to keep pace with the healthy herd, it may be abandoned or killed.



Figure 6. Picture of an abused cow carried on a bike (Nairaland Forum, 2015).

13. Factors that inspired Boko Haram to rustle animals

One was the clampdown on their financial sources by governments around the Sahel region. Between 2006 and 2011, for instance, reports indicate that the group secured approximately \$70 million from various illicit sources (Uche, 2021). The arrest of about 400 business men by the Nigerian government on suspicion of funding Boko Haram and the conviction and sentence of six Nigerians linked to a government official in Abu Dhabi by the United Arab Emirates is cutting off funding (Femi, 2021). This has motivated the insurgents to leverage local measures like rustling to perpetuate insurgency. Figure 7 maps the geographical spread of cattle rustling, transit routes, and armed groups across Nigeria and the Lake Chad Basin.

Another is the predictable movement and concentration of herders and cattle in a contained area. Despite the shrinking of Lake Chad and other surrounding water bodies, they are still natural magnets for pastoralist communities during the dry seasons when other regions face water scarcity and grazing pastures. This large concentration of animals increases opportunities for terrorists to execute single raids on large number of animals (Oluwole & Raoul, 2024).



Figure 7. Map of Nigeria showing the border, spread of cattle rustling, transit points and armed groups (Madueke, 2023, p.15).

Furthermore, the porous border, difficult terrain, and weak security in the region is another source of inspiration. Since the basins marshy terrain is difficult to patrol by security forces, the area provides rustling groups with safe havens to operate freely (Oluwole & Raoul, 2024). The fourth is the proximity of the area to the terrorist group's base. This is backed by a recent field research which found that the closeness of the Chad and Cameroon common border areas makes it easier for Boko Haram to play a prominent role in cattle rustling activities (Oluwole & Raoul, 2024).

Finally, there is the need to exert dominance over the local population in the region. This is supported by the ENACT article, where it stated that where Boko Haram has established considerable influence, it employs direct violent raids for rustling and illegal tax imposition (Oluwole & Raoul, 2024).

14. How Boko Haram terrorists rustle animals

14.1. Violent tactics

The availability of water and grazing pastures in the Chad region makes the place attractive for pastoral settlements. The transhumance system of these pastoralists makes them move to basins with marshy terrains that are hard to patrol. Boko Haram terrorists, who have established control over some parts of the region, conduct violent raids to steal cattle and abduct herders. When this is achieved, the terrorists will demand ransom before the livestock and herders are released. This has made many communities submit to the illegal structure of paying protection fines to avert future attacks.

14.2. Illegal tax imposition

Another method Boko Haram uses to rustle livestock is the imposition of illegal tax in pastoral communities. Boko Haram has established a tax system. 'They say that each herder must pay such an amount of money. If the herders refuse to give them, they will kill them and take the

cattle. And give their livestock to another person to go and sell.’ Butchers in Bongor, Chad, report to ENACT (Oluwole & Raoul, 2024).

14.3. Cattle round tripping

This is the last innovative method used to rustle livestock. Under this system, terrorists capitalize on deficiencies in legal and market systems to profit from rustled livestock. After executing a raid in a predominantly pastoral community with weak security, they will transport them with the help of intermediaries to distant locations where it will be difficult for security agents to track. ‘Sometimes, they take cattle from Cameroon and go into Nigeria to exchange them for other cattle so that they won’t be known. They would then bring them back (exchanged cattle) to markets in Cameroon for sale’-Anonymous Cameroon military official (Oluwole & Raoul, 2024).

15. Illicit financial flows and the negative effects of Livestock rustling

‘The progressive occurrence of cattle rustling involving armed bandits in Nigeria has been a trigger in attacks by herders in farming communities. At the moment, Zamfara State in the Northwest region of Nigeria remains a hotspot for cattle rustling activities, despite the amnesty programme granted by the state governor in 2017 for cattle rustlers to lay down their weapons’ - Osariemen Amas-Edobor (Programme officer for the West Africa Network for Peacebuilding-Nigeria). The chairperson of a local cattle association in Borno State, Nigeria, in 2016 estimated that about 200,000 head of cattle had been stolen through rustling, though not all were linked to Boko Haram. With overall estimates of Boko Haram's accumulation varying from a few million dollars to upwards of \$20 million, one is tempted to ask if animal husbandry is a worthy venture to invest in (Enact Observer, 2017). See figure 8 which summarizes the impact of cattle rustling and violence in Zamfara State between 2011 and 2019.

Cattle rustling has been causing regional imbalance across West Africa. With Niger and Mali, the two largest producers of cattle and epicenters of cattle rustling, the supply chains of stolen cattle that connect armed groups, criminal networks, and actors across West Africa who transcend national borders have been destabilizing the security architecture of West Africa. ‘Cattle rustling is a major source of funding for armed groups. If we say, for example, that a cow is worth 200,000 CFA, over a short period of time, a group that stole 25,000 head would have amassed 5 billion CFA’ - Anonymous expert from the University of Maroua (ADF, 2025).



Figure 8. Impact of cattle rustling and violence in Zamfara State between 2011-2019 (Madueke, 2023, p.16).



Figure 9. Aftermath of an attack by Boko Haram (Idowu, 2018).



Figure 10. Picture of the bodies of innocent Nigerians gruesomely murdered by Boko Haram terrorists (News Agencies, 2024).

In the middle belt state of Plateau, eight out of seventeen local government areas have been ravaged by the activities of cattle rustlers. (Abimaje, 2014, cited in Olaniyan & Yahaya, 2016). Reports by a Security Special Task Force set up by the Federal government in response to the security challenges in the state reveal that 160 attacks by suspected gunmen led to the rustling of 2,501 cows and the death of 260 people (Ajijah, 2014). A devastating consequence of the Boko Haram attack is illustrated in Figure 9.

On the 11th of November 2018, Boko Haram insurgents attacked Bale Shuwa village in the Jere local government area of Borno State, where they burnt 65 houses and rustled 200 cows together with 300 sheep and goats before injuring and killing several people (Idowu, 2018).

The involvement of armed groups in cattle rustling stalls economic and agricultural activities in the Sahel region. This has made it difficult for Northern Nigeria to actualize the SDGs of zero hunger and no poverty. Take a look at figure 10 which shows the aftermath of a Boko Haram attack that claimed the lives of innocent civilians.

According to Ahmadu Suleiman, Chairman of the Kaduna State Chapter of the Miyetti Allah Cattle Breeders Association of Nigeria, between October 2013 and March 2014, approximately 7,000 cattle were rustled from commercial livestock farms and traditional herders in Northern Nigeria (Bashir, 2014).

Due to the activities of rustlers around Northern Nigeria, many livestock farmers have begun migrating to neighbouring countries where their animals can be safe. This drains GDP from Nigeria, uproots families from their ancestral homes, and makes the education of the Nigerian child disjointed. This was re-echoed when Dodo Oroji said, 'The migration of farmers and herdsman affects the education of their children. When they migrate, their children will be out of school, and because parents spend more time rearing their animals, they have no time to enrol the children in another school.' Britain's Department for International Development estimates that the sale of Nigerian animal skins and meat amounts to more than \$800 million in foreign revenue each year. With the majority of this money stolen through the activities of rustlers, people are afraid to venture into the cattle business across Northern Nigeria. 'If people don't want to venture into the business because they are not sure of getting good profits, it becomes a problem' - Abdiel Kude, Executive Director of the Global Community Prime Initiative (Reliefweb, 2015).

In Northern Nigeria, the livelihood of many people depends on animal husbandry, but rustlers are causing setbacks. A 40-year-old woman whose husband was killed when he tried to save his herd from rustlers who stole 48 cows during a raid became a widow. If the livelihood had not been tampered with, an average cow from the herd would have been sold for \$500 each. Left with no source of livelihood, she now borrows milk from a neighbour's cow to sell and fend for her six children (Reliefweb, 2015).

Although accurate numbers are hard to gauge, as many rustling activities go unreported, the Miyetti Allah Cattle Breeders Association of Nigeria (MACBAN) estimates that Nigeria will lose about 40 million cattle to rustlers over the next few years if nothing is done to stop rustling (Reliefweb, 2015).

In a 2016 report, Boko Haram in Borno State killed 1,900 Shuwa Arab pastoralists (Conciliation Resources, 2024). The Shuwa Arabs are a nomadic/semi-nomadic, predominantly Muslim ethnic group of Arab descent located around the Lake Chad region, primarily in Nigeria, Cameroon, Chad, Sudan, and the Central African Republic (Africa 101 Last Tribes, n.d.) These terrorists went further to destroy 363 villages before burning down 19,000 houses. This climaxed with the rustling of 160,000 cattle, 67,000 sheep and goats, and the theft of 400,000 sacks of grain.

An Armed Conflict Location & Event Data (ACLED) project reported that Boko Haram cattle rustling in the border areas of Cameroon and Chad rose from two incidents in 2015 to 131 between January and August 2024 (ADF, 2025).

In 2021, Le Souffle de Maradi, a news outlet in the Republic of Niger, reported that 2,735 cattle were stolen while terrorists abducted 91 people. The families of the hostages had to pay a ransom of over 51 million CFA Francs (over 77,500 Euros) to secure their release. By April 2021, people from the Nigerian-Nigerian border had fled from their ancestral homes for safer towns. When the United Nations Office for the Coordination of Humanitarian Affairs took a census, over 25,000 Nigeriens had been displaced. Figures for Nigeria reveal that 81,000 Nigerians fleeing from rustlers in Zamfara, Sokoto, and Katsina states also joined in seeking refuge in the Republic of Niger (Hassane, 2022).

According to ACLED, more than 37,000 people were killed in the conflict in the Lake Chad Basin between May 2011 and 31st July 2020. Between January and April 2019, the International NGO Safety Organization (INSO) recorded 896 incidents in the Lake Chad Basin that included

kidnappings, attacks, roadblocks, and rustling. Since the beginning of the insecurity crisis in Northeast Nigeria, which is interwoven with rustling and terrorism, more than 360,000 people have been killed in Borno, Adamawa, and Yobe states, with thousands of girls and women abducted. Presently, over 1.9 million people are still displaced, with 80 per cent of them in Borno, the epicentre of the crisis (Médecins Sans Frontières, 2022).

Rustling has left many people in the region in a mental crisis. In Chad, for instance, many people have been thrown into psychological trauma due to what they went through during attacks from armed men.

The rising insecurity in the Lake Chad Basin caused by terrorism and rustling has spiked the number of people facing food insecurity and malnutrition. According to OCHA, by 27 April 2020, 3.6 million people were food insecure around the region, 2.89 million of them in Nigeria alone (Médecins Sans Frontières, 2022).

Due to the activities of rustlers, many people around the Lake Chad Basin have been forced to flee their houses to seek refuge in overcrowded shelters where the insufficiency of water and sanitation is stimulating disease outbreaks. The story is the same in the Republic of Niger, where more than 60% of the displaced and refugee populations living around Diffa have settled in informal sites where living conditions are harsh (Médecins Sans Frontières, 2022).

16. Efforts made so far

The government of the Republic of Niger in 2020 launched operation “Faraoutar Bushiya”, which recruited over 1000 personnel from the army, gendarmerie, police, and National Guard to combat surging banditry, kidnappings, and terrorism along its south-central border with Nigeria, particularly in the Maradi region (Hassane, 2022).



Figure 11. Picture of a woman carrying away relief items provided by MSF after an attack in Niger Republic (Médecins Sans Frontières, 2022).

Since many of the rustlers causing insecurity alternate between Nigeria and Niger, a collaborative team of security forces from both countries has been instituted to enhance better communication and security coordination. Furthermore, Aminu Bello Masari, the Governor of Katsina State, announced the recovery of 30,000 cattle from rustlers within a few months of setting up a joint military operation against the menace (Daily Post Publication, 2016).

Officials from Nigeria, Cameroon, Chad, and Niger are actively collaborating to address the multi-faceted crisis of farmer-herder conflicts, cattle rustling, and shrinking grazing lands, particularly within the Lake Chad Basin region. Through the Lake Chad Basin Governors' Forum, for instance, these nations are already implementing regional strategies to manage pastoral mobility, curb cross-border crime, and foster peace (Presidential Villa State House, 2025). See figure 11 which illustrates humanitarian assistance provided to victims of violence in the Republic of Niger.

17. Who has power to address the menace?

17.1. National Governments

The governments of Niger, Nigeria, Cameroon, and Chad are responsible for enforcing laws about rustling and the movement of livestock across borders. By strengthening rustling laws, there will be a significant reduction in the menace. Officials in these countries, too, need to be held accountable by the populace to make them discharge their duties effectively.

17.2. Buyers, butchers, meat industries, and common people

Without the demand for rustled meat by these groups, the illicit financial flow through rustling will fade away. These groups should abandon the purchase of rustled meat from black markets and adopt sustainable purchasing practices that will make genuine meats available. Members of the wider society should also learn to report suspicious movements of rustlers to security agents for quick intervention.

17.3. International and non-governmental organizations

Through the large networks of these organizations, countries will be able to work together along the borders to curb the illegal movement of livestock for illicit financial gains. These organizations also have the capacity to raise awareness and conduct innovative research that will proffer sustainable measures to curb rustling across the Chad Basin.

17.4. Religious and traditional leaders

Religious leaders like pastors, priests, and traditional leaders, and imams also have a vital role to play in curbing the menace. When these clergymen start delivering fiery sermons that frown against livestock rustling, the conscience of perpetrators will be awakened to abandon the practice.

17.5. Security agencies

Due to corruption, many security agents saddled with the responsibility of preventing rustling receive bribes from rustlers to keep the practice ongoing. Frequent anti-rustling and corruption training courses should be incorporated into the security architecture to equip security personnel with the capacity to stop the menace.

18. Recommendations for reform

18.1. Public awareness campaigns

With rustling being a traditional means of displaying prowess being eroded by the recent infiltration of terrorist and armed groups, engaging traditional leaders to discourage the practice is an effective measure to tackle the menace at its root. This could be augmented with the adoption of educational campaigns that will enlighten the public on how to properly handle animals and deter potential buyers from purchasing rustled livestock.

18.2. Establishment of grazing reserves

Due to the lack of grazing pastures around the Lake Chad region during the dry season, herders move to isolated regions where they are exposed to rustlers. To curb the menace of rustling, governments of countries around the Lake Chad basin need to establish ranches that will provide a controlled environment and excellent pasture, facilitate the security of livestock, provide social amenities, and enable the marketing of genuine livestock. This will increase the GDP of countries through the creation of jobs for the unemployed that once engaged in criminal activities like rustling, reduce the spread of zoonotic diseases, improve the infrastructural landscape of rural communities, reduce farmer-herdsmen clashes, and limit illicit financial flows to criminal networks.

18.3. Livestock census and electronic identification

Recently, the Nigerian government established a National Animal Identification Traceability System (NAITS) meant to prevent cattle rustling and promote livestock production in the North, where more than 83% of livestock is concentrated (Shehu, 2024). Governments of countries around the region need to follow suit to tag all the livestock in their countries. This will discourage the rustling of livestock to satisfy the demand from the black market.

18.4. Amnesty programmes

‘Small arms and light weapons (SALW) in the Lake Chad Basin are slowly becoming weapons of mass destruction. The proliferation of small arms in the Lake Chad Basin is a major security concern that has far-reaching consequences for the region. It has contributed to the escalation of conflict and violence and has impeded the economic and social development of the countries in the region. Their widespread availability has caused tremendous harm to communities and individuals, especially women and children.’ - Boss Mustapha, former Nigeria’s secretary to the Government of the Federation (ADF, 2023).

Although estimating the exact amount of illicit arms in the Lake Chad region is difficult due to the nature of the trade, which is often carried out through black markets and other illicit channels, Nigeria, according to most reports, accounts for at least 70 per cent of the illegal SALWs circulating within the West African sub-region (This Day Newspaper, 2023). With these weapons used to perpetrate criminal activities like rustling, banditry, and kidnapping, amnesty programmes that will help in the peaceful recovery of these arms are a necessity. See figure 12 which shows weapons recovered during operation Safe Haven, and highlights the importance of disarmament initiatives in combating livestock rustling and related crimes. This will help in stabilising the security of the region. The government also needs to equip repentant Africans who submit to these programmes with resources that will help them to be self-sufficient.



Figure 12. Picture of weapons recovered from bandits during Operation Safe Haven in north-central Nigeria are displayed before being handed over to the National Centre for the Control of Small Arms and Light Weapons (ADF, 2023).

18.5. Security reinforcement

Since many rustling activities take place in rural areas, security forces need to work with local security to develop early warning systems. Through this, they will be able to use traditional knowledge and communicate rustling activities using modern gadgets.

18.6. Strengthening border control

Many of the borders around the Lake Chad Basin are porous, making it easy for rustlers to perpetuate their activities without resistance. With human resources stretched beyond the elastic limit, more customs and border control officers should be recruited, trained, and equipped with drones to safeguard our borders against rustlers.

18.7. Legal reforms

From a legal perspective, livestock rustling is considered a theft under Nigerian law, punishable by imprisonment and fines. However, enforcing these laws in remote and under-resourced areas presents significant challenges. Weak law enforcement capacity, corruption, and the vastness of rural landscapes contribute to the impunity with which rustling activities are often carried out. To this end, the governments of Niger, Nigeria, Cameroon, and Chad should impose stiffer and harsher penalties in the form of capital punishment or life imprisonment on perpetrators of cattle rustling to serve as deterrence to others. Rustling mobile courts should be situated along border communities to hasten the delivery of judgment for offenders. All forms of corruption among security agents should be checked through strategic monitoring and training.

18.8. Leveraging technology

With the current advancement in technology, the cattle breeders' association across the continent should supply advanced technology, like positioning system-tracking chips to livestock farmers. This will aid security forces in tracking the movement of cattle to prevent rustling. This should be augmented with the creation of security units in remote areas that will be equipped with modern tracking technology, satellite surveillance, and drones to monitor illegal livestock movement across borders. DNA testing kits need to be provided around the Sahel region. This will help in the rapid conviction of suspected rustlers caught with rustled animals. Finally, through the strategic placement of cameras with night vision capacity, rustling activities can be easily mitigated.

18.9. Partnership with transport unions

Experience has shown that when rustlers and intermediaries rustle livestock, they often transport them to distant locations where tracking by authorities is difficult. To this end, transport unions across the Lake Chad basin should enforce the use of digital cattle manifest by animal marketers to address cross-border rustling. In addition, trucks conveying cattle should be forced to show their loading and unloading permits through international and animal control borders to checkmate and strengthen measures to curb livestock theft in the region.

18.10. Increasing formal employment opportunities

According to Mrs. Zainab Salamiver, who is the Executive Director and Co-founder of MSwitch Creative Hub, 'over 53% of young Nigerians aged 15-24 are either unemployed or underemployed' (Nzor, 2025). For those living along the borders, they turn to pastoralism, which is currently hampered by climate change. The degradation of pasture due to disrupted rainfall patterns is driving many of these youths to join bandit groups in the region. To address this, employment opportunities should be provided for the unemployed around the border to prevent them from being wooed into rustling.

18.11. Research

The security agencies should conduct a thorough investigation to unravel the network of cattle rustlers, identify those behind the supply of arms, and determine the perpetrators of rustling who transport the rustled cattle to the markets, the markets where the rustled cattle are sold, and those buying and disposing of stolen cattle. Universities in the region should also allocate funds to conduct research that will strengthen sustainable livestock farming, with the capacity to deter rustling activities.

18.12. Livestock and border monitoring systems

Leveraging tags and implants with radio frequency identification chips is another effective way to track livestock movements and notify security authorities to speed up rescue. The government should also ensure that the demand and supply chains, as well as the operational routes, market networks, syndicates, and infrastructures of cattle rustling, are systematically identified and demolished to eliminate the illegal practice.

19. Conclusion

After completing my service year in Northern Nigeria, my family was delighted that I returned safely. Routinely, I get distress calls from past students of mine in the region, where livestock contributes up to 44% of agricultural GDP annually (Food Farm News, 2016). This makes me sad. The activities of these criminal networks that leverage rustling to finance their criminal activities continue to limit the capacity of these communities to actualize the Sustainable Development Goals. I am confident, however, that the adoption of the recommendations raised in this paper will curb the menace, encourage development, and limit illicit financial flows across the region.

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Strengthening African Healthcare Systems: Lessons from Cervical Cancer for Local Innovation, Digital Solutions, Holistic Healthcare, and Sustainable Investment

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Abstract: This essay explores the structural and systemic challenges facing healthcare systems in Africa, using cervical cancer as a case study to examine broader health inequities and opportunities for reform. Despite being largely preventable and treatable, cervical cancer remains a leading cause of cancer-related deaths among African women, underscoring gaps in public health education, vaccine access, treatment availability, and policy implementation. Drawing on both scientific research and personal experience, the essay highlights how issues such as limited screening infrastructure, weak pharmaceutical production, restrictive intellectual property laws, lack of education, and cultural hesitancy contribute to preventable mortality. Key solutions are proposed, including investing in local drug manufacturing, expanding digital health tools, integrating traditional and modern medical systems, and prioritising public health education. While cervical cancer serves as the focal point, the insights presented are applicable to a wide range of high-burden diseases, both communicable including HIV, tuberculosis, and non-communicable including cancer, diabetes, and hypertension. Ultimately, the essay advocates for an African-led approach to healthcare innovation that is equitable and sustainable.

Keywords:

1. Cervical Cancer
2. Healthcare Access
3. Intellectual Property Rights
4. Local Pharmaceutical Manufacturing
5. Global Health Equity

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1. Introduction: Understanding the Landscape of Health Inequities in Africa

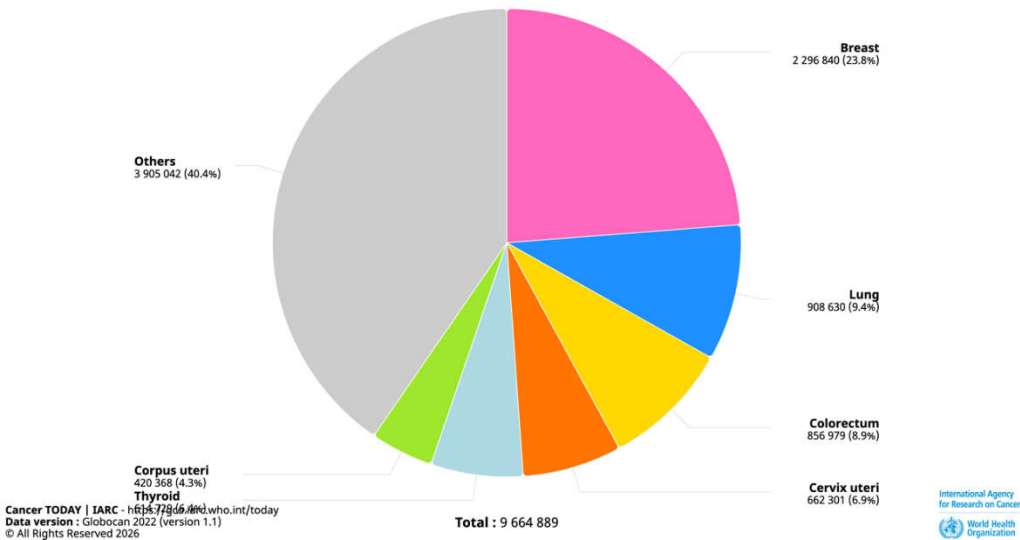
Africa faces significant healthcare challenges, characterised by high disease burdens, fragmented health systems, and limited access to essential healthcare infrastructure and therefore disease prevention and treatment. These challenges are particularly evident in the rising incidence of non-communicable diseases (NCDs) such as cancer, diabetes, and hypertension, alongside the persistent burden of infectious diseases like human immunodeficiency virus (HIV) and tuberculosis

(TB) (Addo et al., 2024; Boutayeb, 2010; WHO, 2022; Eike et al., 2022; Levitt et al., 2011). While substantial progress has been made in reducing mortality caused by communicable diseases, NCDs are now emerging as leading causes of death across the continent, placing additional strain on healthcare systems already struggling with inadequate infrastructure, financial limitations, workforce shortages, and cultural hesitancy (WHO, 2022; Owolade et al., 2022). For example, in 2020 alone, an estimated 10 million cancer-related deaths were reported globally, making it one of the leading causes of mortality worldwide. Although this number is predicted to increase worldwide, the rise is expected to occur predominantly in low- and middle-income countries (LMICs), as they currently face the greatest challenges in tackling the cancer burden (Sung et al., 2021; Wild et al., 2020). Among all cancers, cervical cancer stands out as a particularly urgent public health issue. Globally, cervical cancer is the fourth most common cancer in incidence and mortality among females, behind breast, lung, and colorectal cancer, accounting for approximately 660,000 new cases and 340,000 deaths annually (Figure 1) (Arbyn et al., 2020; Cohen et al., 2019; Sung et al., 2021).

Importantly, in 2022, about 94% of the 340,000 deaths caused by cervical cancer occurred in LMICs, making it the leading cause of cancer-related deaths in 36 LMICs, placing a significant burden on these already inadequate healthcare systems (Arbyn et al., 2020; Sung et al., 2021). Specifically, the highest rates of incidence and mortality were reported in sub-Saharan Africa, Central America, and South-East Asia (Arbyn et al., 2020; Cohen et al., 2019). Although LMICs account for a high percentage of the global population, GLOBOCAN 2022 reported that sub-Saharan Africa had the highest age-standardised cervical cancer mortality rate globally at, on average 22.1 per 100,000 women, more than ten times that of North America (2.2 per 100,000) (Figure 2) (Wu et al., 2025). In Eswatini and Malawi, mortality rates are 62.3 and 54.1 per 100,000 respectively, the highest cervical cancer mortality rates globally (Figure 3) (Wu et al., 2025). It is in these LMIC regions that women present with advanced-stage disease, and, despite important advances in our understanding of cervical cancer as a potentially preventable disease, there have yet to be major improvements in patient survival to reduce the disease burden (Cohen et al., 2019).

Cervical cancer was the focus of my PhD research at the University of Cape Town, for which I have dedicated several years to investigating the molecular mechanisms of cervical cancer. It is through growing up, living in, and studying in Africa that I have witnessed first-hand, through my personal experiences, my research, and my teaching and outreach, the devastating toll this disease takes on individuals, their families, and entire communities. Beyond the biological intricacies of this disease, I have also seen how systemic healthcare barriers, such as limited access to screening, lack of treatment options, cultural hesitancy, and financial constraints exacerbate health disparities and lead to poor outcomes. These experiences have reinforced my belief that while cervical cancer is a preventable and treatable disease, its high mortality rate in Africa reflects deeper structural failures within healthcare systems. Thus, this essay will use cervical cancer as a case study, an area of my expertise, to explore the broader reforms needed to improve healthcare accessibility across the continent. Many of the challenges and solutions presented, such as education on health, pharmaceutical sovereignty, digital health expansion, holistic approaches, and IP law reform, are not exclusive to cervical cancer but can be adapted to address other high-burden diseases, including other cancers, diabetes, cardiovascular disease, HIV, and TB. By addressing those systemic weaknesses through policy change, investment in local solutions, and community-driven healthcare strategies, African nations can transform their healthcare systems to provide more equitable, sustainable, and effective care for all diseases, not just cervical cancer.

a)
Absolute numbers, Incidence, Females, in 2022
Continents



b)
Absolute numbers, Mortality, Females, in 2022
Continents

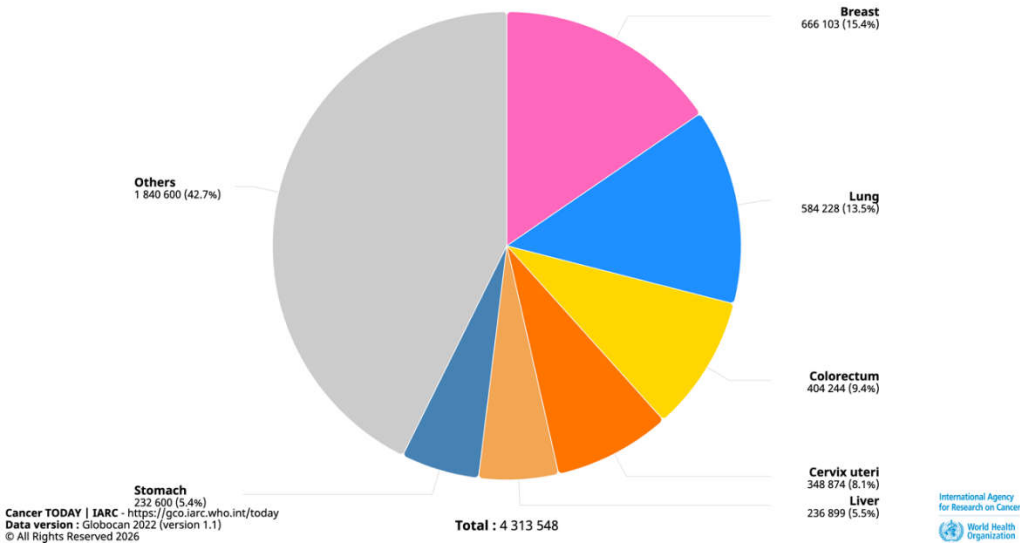


Figure 1. Global distribution of cancer (a) incidence and (b) mortality among females. Data obtained from GLOBOCAN 2022 via the IARC Cancer Today platform (Global Cancer Observatory).

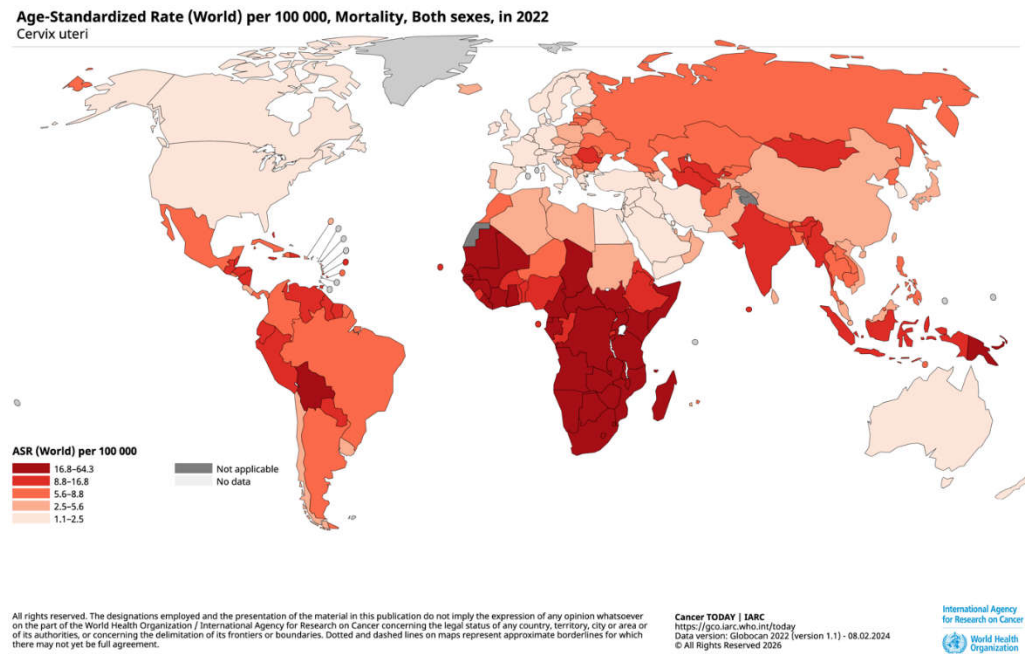


Figure 2. Global distribution of age-standardized mortality rates (per 100,000 population) for cervical cancer. Data obtained from GLOBOCAN 2022 via the IARC Cancer Today platform (*Global Cancer Observatory*).

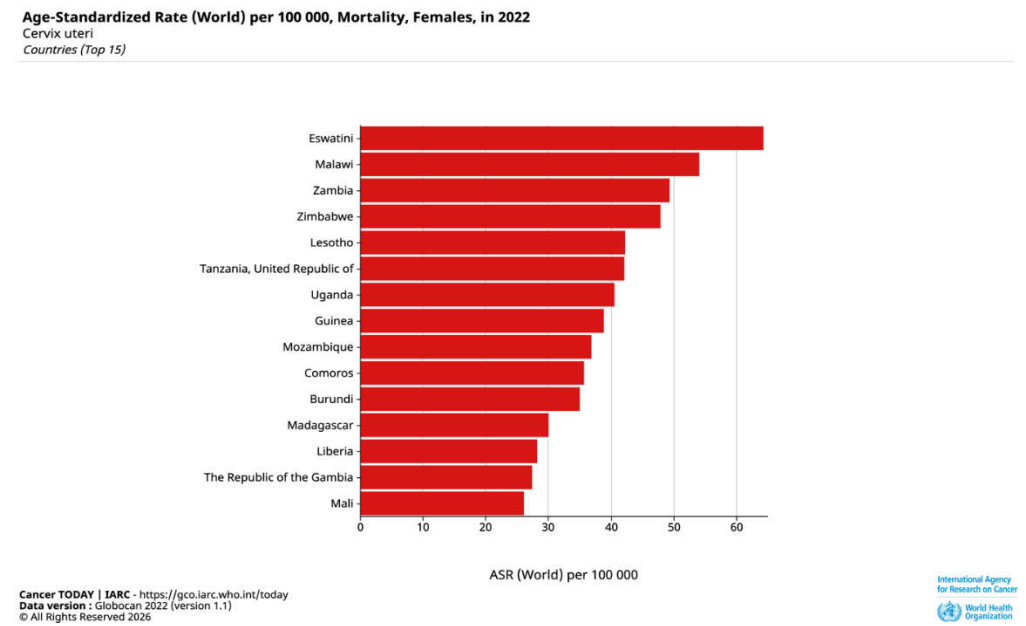


Figure 3. Countries with the highest age-standardized mortality rates (per 100,000 women) for cervical cancer among females globally. Data obtained from GLOBOCAN 2022 via the IARC Cancer Today platform (*Global Cancer Observatory*).

2. Cervical Cancer Prevention: Understanding the Role of HPV and Vaccination

The major etiological agent that leads to the development of cervical cancer is infection by high-risk types of the human papillomavirus (HPV) (Burd, 2003). HPV is a sexually transmitted virus with transmission primarily occurring through skin-to-skin contact, and its prevalence being particularly high in women younger than 25 years (de Sanjosé et al., 2007). HPV encompasses over 200 types, categorised into high-risk and low-risk groups based on their oncogenic (cancer-causing) potential. High-risk HPV types, such as HPV16 and 18, are strongly associated with the development of cervical cancer, while low-risk types, like HPV6 and 11, are primarily linked to benign (non-cancerous) conditions such as genital warts (Burd, 2003; Zur Hausen, 1999). The estimated worldwide prevalence of both high- and low-risk types of HPV among women with no signs of infection is 11.7%. However, there is considerable geographic variation, with sub-Saharan Africa having the highest HPV prevalence (24%) amongst women with no symptoms (WHO, 2024). Furthermore, over 70% of all global human immunodeficiency virus (HIV) positive individuals also reside in sub-Saharan Africa (Bruni et al., 2010), and there is compelling evidence that women living with HIV are at increased risk of persistent infection with multiple types of HPV at an early age (13–18 years) (Denny et al., 2014; Moodley et al., 2006, Moodley et al., 2009). Indeed, repeated infection with high-risk HPV types is responsible for up to 95% of cervical cancer cases (Cohen et al., 2019; Johnson et al., 2019), and individuals living with HIV have a six-times higher risk of developing cervical cancer when compared to the general population (Grulich et al., 2007). Importantly, a study in South Africa between 2001 and 2009 showed that the increase in cervical cancer incidence could be explained by the increased number of HIV infections observed during this period (Olorunfemi et al., 2018). Furthermore, the increased number of women living with HIV receiving anti-retroviral therapy results in improved life expectancy of women also living with HPV, compared to women living with HPV and not receiving anti-retroviral therapy. This indicates that access to treatment improves patient outcomes not just for HIV but for HPV as well (Ghebre et al., 2017). In addition to this, certain behavioural factors such as having multiple sexual partners and early initiation of sexual activity increase the risk of acquiring HPV (Panatto et al., 2012). Smoking has also been identified as a co-factor in cervical carcinogenesis, along with the use of some types of oral contraceptives and alcohol consumption, as these compromise immune function to allow persistence of high-risk HPV infections (Plummer et al., 2003; Veldhuijzen et al., 2010). Moreover, HPV is not limited to causing cervical cancer in women. It is also implicated in the pathogenesis of other anogenital cancers in both men and women, including vulvar, vaginal, penile, and anal cancers, as well as a growing number of oropharyngeal cancers such as head and neck cancer, highlighting its growing burden in disease development (Gillison, 2009; Timbang et al., 2019; Trottier & Burchell, 2009).

Through extensive research into cervical cancer, it has become evident that tackling this crisis requires a multi-pronged approach to close the gap between disease burden and disease prevention and treatment in under-resourced regions. Such an approach must include improving and expanding education on health and disease, strengthening local pharmaceutical production, expanding digital health solutions, integrating traditional and holistic medicine into modern healthcare frameworks, and improving health financing models. While this discussion focuses on cervical cancer, the challenges it highlights — poor screening and treatment infrastructure, insufficient vaccine distribution, financial inaccessibility, cultural hesitancy due to lack of education, among others — are common to other diseases faced in the African context (Addo et al., 2024; WHO, 2022; Eike et al., 2022; Levitt et al., 2011). By applying the lessons

learnt from cervical cancer, broader healthcare reforms can be developed to improve disease prevention, early diagnosis, and treatment capacity across Africa.

3. Empowering Communities Through Education: Overcoming Barriers to Prevention and Treatment in Africa

Despite being highly preventable and treatable, cervical cancer continues to claim thousands of lives each year among African women due to a combination of limited awareness and education, misinformation, stigma, restrictive gender norms, and deep-seated cultural barriers (Brown et al., 2011; Ginjupalli et al., 2022; Omotoso et al., 2023). Addressing these challenges requires comprehensive community education that, by raising awareness and dismantling harmful myths, empowers women to make informed healthcare decisions.

Discussions surrounding HPV, a sexually transmitted infection that can lead to the development of cervical cancer, are taboo in many communities, particularly African communities. Parents, especially in conservative societies, frequently resist vaccinating their children due to fears that the HPV vaccine will encourage promiscuity. Similarly, many women avoid screening due to misconceptions that the procedure is painful, unnecessary, or even a sign of infidelity. In some rural areas, male partners and community elders exert significant influence over women's healthcare choices, making it difficult for women to independently access medical facilities, whether for screening, prevention, or treatment (Brown et al., 2011; Ginjupalli et al., 2022; Omotoso et al., 2023). These cultural barriers must be addressed through community-centred education initiatives that engage leaders, traditional healers, and local influencers within these communities — trusted voices that can help normalise discussions on cervical cancer as well as other prominent diseases.

South Africa provides a valuable case study in overcoming these challenges, largely due to the contributions of the distinguished gynaecologist and cervical cancer researcher, Dr. Lynnette Denny. Her pioneering work has significantly improved cervical cancer prevention and care, particularly in underserved communities. In 1995, Dr. Denny co-founded the Khayelitsha Cervical Cancer Screening Project, which initially operated from a mobile clinic and later evolved into a permanent health centre. Over two decades, this project screened more than 60,000 women, providing vital early detection services in a region with limited healthcare infrastructure (Jeronimo et al., 2017; Metelerkamp, 2022). Dr. Denny also championed the “screen and treat” approach, combining immediate treatment with screening to enhance patient outcomes. A number of studies have demonstrated that implementing this method in LMICs has led to a significant reduction in high-grade cervical lesions, a precancerous condition, among participants, underscoring its effectiveness in resource-limited settings (Shin et al., 2021; Wright & Kuhn, 2012). Furthermore, Dr Denny's research into alternative screening methods, such as visual inspection with acetic acid (VIA), offered cost-effective solutions for early detection. Indeed, a study involving 2,754 women in a peri-urban settlement outside Cape Town found that VIA could serve as a feasible alternative to the traditional screening approach, the Pap smear, especially in settings with limited medical infrastructure (Denny et al., 2002, 2005; Gaffikin et al., 2007). Through these initiatives, Dr. Denny has played a crucial role in increasing cervical cancer awareness, screening uptake and early treatment in South Africa, reducing the stigma associated with clinic visits regarding female reproductive health, which together provide a model for other African nations aiming to reduce stigma as well as cervical cancer mortality rates through localised, culturally sensitive approaches.

Beyond screening and vaccination, symptom awareness and early diagnosis are crucial for reducing cervical cancer mortality. Many women in Africa do not recognise the early warning signs of cervical cancer, such as abnormal bleeding, persistent pelvic pain, and unusual vaginal discharge. This leads to women seeking medical attention only when the disease has progressed to an advanced stage. Community health programs should actively educate women about these symptoms and emphasise the importance of seeking timely medical care. To break through the stigma and hesitancy surrounding cervical cancer, community engagement strategies must be tailored to the specific social and cultural dynamics of each region. Governments and health organisations should develop education campaigns in local languages, using familiar platforms such as radio, television, social media, and community meetings, to reach diverse populations. School-based initiatives such as educational talks, videos, and vaccination programs should be accompanied by parental education sessions to address any hesitancies. Additionally, door-to-door health education by community health workers can help build trust and encourage participation in screening programs and prevention. Men's involvement is also critical. Initiatives that educate husbands, boys, and male community leaders on the importance of cervical cancer prevention and screening can help change restrictive gender norms that limit women's healthcare autonomy.

Finally, integrating traditional medicine and holistic care can further strengthen cervical cancer education and prevention, which will be discussed in more detail below. Many African women seek care from traditional healers before turning to formal medical institutions. Collaborating with traditional health practitioners to incorporate accurate cervical cancer information into their practice can help bridge the gap between modern medicine and indigenous health beliefs. Additionally, holistic approaches such as nutritional guidance and lifestyle education can be promoted alongside medical interventions to encourage overall well-being and avoid exclusive reliance on medical interventions. Importantly, although these solutions are aimed towards African communities, many of them can be used across other cultural groups and can be tailored to ensure they are appropriate for addressing the relevant challenges.

4. Strengthening Local Pharmaceutical Production: Closing the Treatment Gap

Access to essential medication remains a major challenge in Africa, with many treatments either unavailable or limited by high costs (Yenet et al., 2023). Expanding local pharmaceutical production is crucial to addressing these shortages and strengthening healthcare systems. Equally important, as stated previously, is educating communities and healthcare providers about treatment options to ensure that patients can make informed decisions and access the care that they need. In the case of cervical cancer, many communities in Africa face a severe shortage of locally produced HPV vaccines, chemotherapy drugs, radiotherapy infrastructure, and alternative therapies for this disease. Indeed, despite the existence of highly effective HPV vaccines (such as Gardasil and Cervarix), the majority of African countries rely on international donations or expensive imports for these, which results in low vaccination coverage (Asgedom et al., 2024). Although in use in the private sector in many urban African settings, HPV vaccines were only introduced into the National Immunization Programs (NIPs) in 2011 when Rwanda became the first African country to successfully implement an HPV vaccination program (Fokom Domgue et al., 2024). Despite the WHO's recommendation for universal HPV vaccination, only 27 out of 54 African countries have incorporated the HPV vaccine into their routine immunization programs, and as of 2022, coverage of the first dose in these countries stands at only 33%, falling far short of the global target of 90% (WHO, 2024). This major shortfall is often

due to the extreme cost of HPV vaccination which varies considerably. In countries where the Vaccine Alliance, Gavi, supports improved access to immunization, such as Rwanda and Ethiopia, the negotiated price per dose of HPV vaccination between 2013 and 2017 was US\$4.50, subsidised through international partnerships (Kutz et al., 2023; Gavi, 2013). However, in non-Gavi-supported countries like South Africa and Botswana, where governments must purchase doses directly from manufacturers, the cost can exceed US\$40 per dose, or roughly US\$120 per full three-dose series (Amponsah-Dacosta et al., 2022). With the World Bank classifying 85% of Africans as living on less than \$5.50 per day and thus on monthly incomes below US\$200, even partially subsidised vaccination remains financially out of reach for many families (Aguilar et al., 2019). In Uganda, for example, the HPV vaccination is equivalent to nearly a week's income for someone earning minimum wage. This is made more challenging by the HPV vaccine in most African nations not being fully covered by public insurance schemes and hence having to be paid for out of pocket, except in select urban programs targeting school-aged girls in which vaccination is free.

In contrast, LMICs with established local vaccine production, such as India, have dramatically reduced vaccine costs. Cervavac, which is locally manufactured by the Serum Institute of India, is available for under US\$5 per dose. This is more than eight times cheaper than in many African markets (Rahman, 2022; Johnson, 2024). This striking difference highlights how local manufacturing capacity directly affects affordability and accessibility. According to the WHO, while HPV vaccination has led to a significant reduction in cervical cancer incidence in high-income countries, many African nations that are struggling or just able to reach 30% coverage among eligible girls results in millions of women vulnerable to developing a largely preventable disease (Cohen et al., 2019; Ebrahimi et al., 2023). Strengthening local pharmaceutical and vaccine production could therefore be one of the most promising solution to this burden by substantially reducing vaccine cost, improving coverage, and enhancing healthcare sovereignty across the continent.

Investing in local vaccine production will allow immunisation programs in Africa to reach more young girls before they become sexually active. This would also alleviate the expense of implementing vaccination programs into schools, a key area that African governments should be focusing on to drive the target of 90% vaccine coverage among girls and women. In this regard, Africa has taken strides in vaccine manufacturing which could be enhanced and expanded. This includes South Africa's mRNA technology hub, which already produces COVID-19 vaccines and could be expanded to produce HPV vaccines (WHO, 2023). Egypt, Kenya, Senegal, and others are examples of countries developing pharmaceutical production capabilities. Indeed, Egypt leads North Africa in this regard, with extensive vaccine manufacturing (including hepatitis B and rabies) through state-owned facilities like Vacsera, and it possesses high technological capabilities in formulations. Kenya is ranked among the most notable pharmaceutical producers in sub-Saharan Africa. It is expanding its capacity for medicine production and has been identified as a site for technology transfer for mRNA vaccines. Lastly, the Institut Pasteur de Dakar in Senegal is a key continental hub, known for producing yellow fever vaccines for Africa and global markets. It is part of the WHO's mRNA technology transfer hub initiative. While these efforts remain in their early stages, they illustrate the growing feasibility of regional pharmaceutical self-sufficiency and the continent's capacity to reduce dependency on imported vaccines (Saied et al., 2022; Banda et al., 2022; WHO, 2021).

Nations including Nigeria, Ghana, and Morocco have also announced strategic plans to develop local vaccine and drug manufacturing hubs by 2030, underscoring a continent-wide

movement toward medical industrialisation. This development is urgently needed, given that only 33% of girls in sub-Saharan Africa have received even a single HPV vaccine dose and fewer than 20% complete the full vaccination series. This contrasts with the 80–90% coverage in most high-income countries (WHO, 2024). Such disparities underscore why expanding local manufacturing is not merely an industrial goal but a public-health imperative, essential to improving affordability, supply stability, and equitable access across the region. For translating vaccine production into high population coverage with real impact, parallel investment and financing in program development and delivery is required.

Beyond prevention, but with the same challenges, the gold standard chemotherapy drugs, including cisplatin and paclitaxel, remain prohibitively expensive, with frequent shortages limiting their availability in public hospitals (Denny et al., 2017; Okunade, 2020). Furthermore, the equipment and expertise required to perform radiotherapy, an essential treatment for over 50% of cervical cancer patients, are severely lacking (Grover et al., 2016; Hope-Johnson et al., 2025; Rhee et al., 2020). The International Atomic Energy Agency (IAEA) reports that 30 African countries have no radiotherapy services at all, and where they do exist, there is often less than one machine per 5 million people. For context, the U.S. has one per 120,000 people (VCDNP, 2022; IAEA, 2022). With regards to chemotherapy, the full course of standard chemotherapy (cisplatin + paclitaxel) costs over \$1,500–\$3,000 USD in private facilities (statistics gathered from Nigeria and Kenya as examples), with availability often limited to urban centres (Higgins et al., 2026; Okunade, 2020). Moreover, chemotherapy is aggressive and leads to debilitating side effects and potential drug resistance, which can result in disease relapse for many patients (Burmeister et al., 2022). To counter this, targeted therapies and immunotherapies are becoming more prominent, including bevacizumab (Avastin) and pembrolizumab (Keytruda). Bevacizumab is known as a monoclonal antibody used to inhibit the development of blood vessels that “feed” tumours and is often used in combination with chemotherapy drugs. Bevacizumab improves survival in advanced cases but costs around \$2,000 per infusion, which makes the full course cost over \$20,000 USD. This is entirely out of reach for most patients in LMICs (Liu, 2021). Pembrolizumab, an immune checkpoint inhibitor also used to treat advanced cervical cancer, can be even more expensive, costing between \$12,000 and \$30,000 for a full course, with significant regional clustering throughout the US (Pajeroski, 2025). Despite the targeted therapies and immunotherapies showing improved survival in advanced cervical cancer, their exceptionally high cost places them out of reach for most patients, which further widens the treatment gap (Tewari et al., 2014; Weaver, 2025). Indeed, these figures equate to more than 30 times the average annual income in many African nations, effectively excluding the vast majority of patients from access to life-saving therapy. Without urgent intervention, these disparities will continue to drive high mortality rates, even as effective treatments remain available elsewhere.

In order to provide more cost-effective options, governments can implement compulsory licensing mechanisms to enable the generic production of high-cost cancer treatments such as bevacizumab and pembrolizumab (Bognar et al., 2016). Compulsory licensing, a flexibility permitted under the World Trade Organisation’s (WTO) Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, allows governments to authorise the production or importation of generic versions of patented medicines during public health emergencies (WTO, 2017). For example, generic bevacizumab manufactured in India by companies such as Hetero Biopharma and Reliance Life Sciences retails at under US\$150–200 per infusion, representing a potential 90% price reduction. Similarly, Chinese and Indian biosimilar pembrolizumab products, currently in late-stage clinical development, are projected to cost US\$300–500 per dose, roughly one-tenth of the brand price (Ebrahimi et al., 2023; WHO, 2023).

Compulsory licensing can be used beyond cancer treatment. Some African nations, including Zimbabwe and Zambia, have previously used it to improve access to antiretroviral drugs for HIV, providing a model for this approach. For example, in 2002, Zimbabwe faced a severe HIV/AIDS crisis, with a significant portion of its population requiring antiretroviral (ARV) therapy. To combat this public health emergency, the Zimbabwean government issued a compulsory license allowing local companies to produce generic versions of patented ARV drugs (Raja, 2002). This initiative led to a substantial reduction in the cost of ARVs, decreasing the average price from \$100–\$150 per month to around \$30 a month, effectively cutting the price by at least 75% (Aidsmap, 2004). Similarly, the Zambian government also confronted a growing HIV/AIDS epidemic by issuing a compulsory license in 2004 to import generic ARV medications. This measure aimed to improve access to life-saving treatments for those affected by HIV/AIDS (Mohara, 2017; T’Hoen et al., 2018). By utilising compulsory licensing, African nations could improve access to affordable cancer treatments, particularly emerging targeted and immunotherapies, thereby enhancing cancer care and patient outcomes across the continent.

Several African nations already possess the manufacturing infrastructure required to operationalise compulsory licensing. Indeed, South Africa has biomanufacturing facilities capable of producing monoclonal antibodies and vaccines (Biovac Institute; Afrigen Biologics). Egypt has a long-established pharmaceutical sector with biologics production capacity, while Morocco and Senegal have both partnered with the WHO and the African Union to expand vaccine and biosimilar manufacturing hubs by 2030 (Saied et al., 2022; WHO, 2021). These countries could serve as regional production nodes, ensuring equitable distribution across sub-Saharan Africa. By leveraging compulsory licensing and regional biomanufacturing, African governments could reduce prices for biologic therapies by up to 80–90%, improve treatment accessibility, and significantly narrow the gap between high- and low-income nations in cervical cancer survival outcomes. This strategy could build upon the successful precedent set during the HIV/AIDS epidemic, when similar mechanisms lowered antiretroviral costs by more than 75%, transforming the continent’s response to a once-intractable health crisis. However, while this is one potential solution reducing the cost of these therapies, even if adopted under compulsory licensing, such reductions still may not make these therapies affordable in LMICs. Therefore, more needs to be done to reduce these costs further.

One long-term strategy to potentially combat the above challenge is investing in African-led cancer research to develop novel, low-cost therapies tailored to resource-limited settings. African research institutions should be supported through public and private partnerships to explore alternative treatment strategies, including natural plant- or marine-based anti-cancer compounds, repurposing drugs, and innovative drug delivery mechanisms that reduce costs while maintaining efficacy (Fletcher, 2024; Chunarkar-Patil et al., 2024; Egwu et al., 2024; Wainwright et al., 2022). Many African research institutions face challenges of limited funding, inadequate infrastructure, and emigration of highly skilled professionals from their home country to another country due to better opportunities, often leading to talent shortages in critical sectors like healthcare and research (otherwise known as “brain drain”). Public-private partnerships (PPPs) can bridge this gap by providing financial resources, technology transfer, and collaborative opportunities with global pharmaceutical and biotechnology companies. These partnerships can involve government agencies, non-governmental organisations (NGOs), private investors, and multinational corporations. Collaborative initiatives like the African Consortium for Cancer Research (ACCR) and partnerships with global organisations such as the Union for International Cancer Control (UICC) can accelerate the development of affordable,

regionally relevant cancer therapies (Fox Chase Cancer Center, 2023; UICC, 2025). Similarly, the Holistic Drug Discovery and Development (H3D) Centre at the University of Cape Town, led by Professor Kelly Chibale, is pioneering efforts to strengthen Africa's pharmaceutical research capacity. By focusing on developing locally relevant treatments and improving access to essential medicines, initiatives like H3D can play a crucial role in expanding affordable cancer care and driving innovation in African healthcare (Jewell, 2024).

Of particular interest to this, Africa has a rich biodiversity with many plants and marine organisms that have yet to be fully explored for their medicinal properties. A large number of studies have identified promising anti-cancer compounds from many African plants (Aboyade et al., 2014; Gouws et al., 2021; McKay & Blumberg, 2007). Similarly, marine-derived compounds, like those from sponges and algae, are being investigated for their cytotoxic effects on cancer cells (Saeed et al., 2021). Furthermore, traditional medicine plays a significant role in healthcare in Africa, and integrating indigenous knowledge with modern scientific research can lead to new breakthroughs. In addition to this, drug repurposing is also highly feasible in these settings, as it involves finding new uses for existing medications that are already approved for other conditions. This approach can significantly reduce research and development (R&D) costs and the time it takes these drugs to reach the patient, as these drugs have already passed safety trials. For example, metformin, a diabetes drug, has shown potential in inhibiting cancer cell growth and treating symptoms of polycystic ovarian syndrome (Attia et al., 2023; Hajjar et al., 2013; Sivalingam et al., 2014). Ivermectin, originally an antiparasitic, has been studied for its anti-tumour effects (Kaur et al., 2024; Tang et al., 2020). Therefore, given the economic constraints in many African countries and the proven possibility of repurposing existing drugs for secondary indications, this approach could provide cost-effective cancer treatment options.

Lastly, innovative drug delivery systems, such as nanoparticle-based delivery, liposomal formulations, and microneedle patches, offer more targeted therapy, reducing side effects and improving drug efficacy of currently available cancer therapies (Egwu et al., 2024). These technologies can also lower costs by reducing the required dosage and improving stability. African researchers are investigating locally adaptable and cost-effective delivery methods, such as nanomedicine formulations derived from indigenous materials, as these enhanced systems, if adequately supported, can transform cancer treatment strategies in Africa, making them more accessible and affordable for patients (Salie & Saidi, 2024). Beyond cervical cancer, strengthening local pharmaceutical production will have far-reaching benefits for other diseases. By reducing reliance on imports, African countries can improve access to critical drugs for other cancers, malaria, and TB, which also suffer from supply chain disruptions and high treatment costs.

5. The Role of Digital Health: Expanding Access to Screening and Treatment

Expanding digital health and telemedicine offers a transformative solution to the longstanding challenge of providing specialised care in Africa's rural and underserved communities. Many people, especially those in remote areas, live far from healthcare facilities, making travel for medical appointments expensive, time-consuming, and often impractical. In addition, hospitals and clinics are sometimes feared due to past negative experiences, cultural beliefs, or misconceptions about certain medical procedures. These barriers often result in delayed or entirely avoided care, which leads to worse/worsening health outcomes. Furthermore, doctor-to-patient ratios are often alarmingly low and healthcare facilities remain fragmented.

Telemedicine and digital platforms present a unique opportunity to bridge these gaps. Indeed, healthcare systems can offer a cost-effective, accessible, and less intimidating first step

toward both education and treatment through the use of telemedicine, which may contribute to individuals feeling more comfortable seeking care. However, in the specific context of cervical cancer, telemedicine cannot replace essential physical procedures such as VIA, Pap smears, or HPV testing, nor can it substitute for biopsy confirmation and in-person treatment. Instead, digital health should be viewed as a complementary tool that enhances early detection, follow-up, and patient education and engagement by informing women and linking them to appropriate screening and care services. Cervical cancer serves as a compelling case study for the potential of digital health. Recent advances in self-sampling HPV tests, combined with remote diagnostic platforms, have demonstrated significant improvements in early detection rates, particularly among rural populations that previously had limited access to preventive services (IBMS, 2024; Shafaghmotlagh, 2024; Daponte et al., 2023; Naikoo et al., 2025; Rebolj et al., 2022). The integration of digital tools into national screening programs enhances patient tracking, facilitates timely follow-ups, and minimises the loss to follow-up that has historically challenged disease management. Telemedicine consultations also allow for private, stigma-free discussions about reproductive health, which can be particularly beneficial in conservative communities where such topics are often considered taboo. Scaling up initiatives such as training community health workers to use AI-assisted diagnostic tools, deploying mobile health (mHealth) applications for chronic disease management and maternal care, and integrating e-health records would ensure patients receive continuous and coordinated care. This approach aims not to replace in-person clinical procedures but to extend the reach and efficiency of existing health systems. It reduces travel burdens and long wait times, while also fostering a more equitable distribution of quality healthcare services across regions (Alowais et al., 2023; Deniz-Garcia et al., 2023; Jones-Esan, 2024; Osei et al., 2021; Osei & Mashamba-Thompson, 2021). Successful digital interventions in cervical cancer screening will not only improve outcomes for a preventable disease but will also lay the groundwork for similar applications in maternal health, infectious disease surveillance, and chronic disease management.

The Flamingo Breast Cancer Project in Cape Town (<https://www.projectflamingo.co.za/>) offers a strong example of how digital health solutions can be successfully implemented in an African setting. The project utilises telephonic consultations, digital imaging, and AI-assisted diagnostics to streamline breast cancer screening and diagnosis, extending specialised care to communities that would otherwise struggle to access it. By allowing patients to have initial screenings closer to home, the project increases early detection rates and also builds trust in the healthcare system, making women more likely to seek in-person medical attention when necessary. Alongside similar innovations, such as Rwanda's Baby! Health (<https://www.babyl.rw/>), which uses AI-driven telemedicine to enhance rural healthcare access, and Nigeria's Helium Health (<https://heliumhealth.com/>), which has revolutionised hospital record digitisation, these initiatives highlight how digital health can bridge geographic and psychological barriers to medical care. By reducing the cost, fear, and logistical burden associated with traditional healthcare visits, digital health solutions offer a practical, patient-centred approach to improving public health. As African nations invest in expanding these innovations, they pave the way for more inclusive, efficient, and community-friendly healthcare systems that address both the structural and cultural barriers to medical care.

6. Bridging Healing Systems: Integrating Traditional, Holistic, and Modern Healthcare

Integrating traditional and modern medicine offers a powerful approach to improving healthcare accessibility, reducing cultural hesitancy, and expanding holistic treatment options across Africa. With around 70% to 80% of the population in Africa relying on traditional medicine, it remains a trusted and deeply rooted form of healthcare, especially in Africa (Anyikwa, 2024; WHO, n.d.). However, traditional healing often exists outside of formal medical systems, which leads to delays in diagnosis and treatment when individuals turn to hospitals as a last resort. Rather than viewing traditional medicine and modern healthcare as competing systems, national health ministries and medical councils should establish formal frameworks that recognise and regulate traditional healers. For example, ministries of health could introduce certification programs that train registered healers in basic diagnostic awareness and patient referral pathways, while medical schools could integrate traditional pharmacology and cultural health practices into their curricula. These steps would build a more integrated, culturally relevant healthcare model to bridge the gap between community-based and institutional care. In addition to this, modern medicine often overlooks preventive lifestyle interventions, focusing instead on pharmaceutical treatments that are expensive and often inaccessible to the broader population. By bridging traditional and scientific approaches, Africa can create a healthcare system that is both evidence-based and culturally familiar, ultimately reducing the stigma associated with hospital treatments and increasing trust in medical services.

Using cervical cancer as an example of this, it has been shown that many women first consult traditional healers before seeking hospital-based care, which often results in late-stage diagnoses and higher mortality rates (Dereje et al., 2025; Mwenda et al., 2024; Sophy & Mavis, 2008.). Rather than dismissing this practice, a collaborative approach, where traditional healers are trained to recognise early symptoms of cervical cancer (such as abnormal bleeding and pelvic pain) and refer women for screenings, would ensure that modern and indigenous knowledge work hand in hand to improve health outcomes. Implementation of such collaboration should be coordinated through existing structures, such as the African Centres for Disease Control (Africa CDC), WHO Regional Office for Africa, and national public health institutes, which could jointly develop training standards and referral protocols. Financing could come from a mix of domestic health budgets, WHO and African Union innovation grants, and public–private partnerships with pharmaceutical and biotechnology firms already investing in local research. Governments could further incentivise participation by providing tax breaks or research grants to companies that collaborate with universities and traditional healers on evidence-based studies of local medicinal plants. Indeed, African medicinal plants such as *Sutherlandia frutescens* has shown immune-boosting and anti-cancer properties, yet remains under-researched and underutilised in mainstream medicine. Dedicated national research funds, similar to South Africa’s Medical Research Council or Nigeria’s Tertiary Education Trust Fund (TETFund), could earmark competitive grants for traditional medicine research, promoting collaboration between healers, universities, and pharmaceutical companies. This would allow Africa to unlock the full potential of its natural remedies while creating affordable, locally available treatment options. Beyond cancer care, integrating traditional and modern medicine interventions can significantly improve the prevention and management of other diseases such as diabetes, hypertension, and maternal health complications. For instance, *Moringa oleifera* and *Vernonia amygdalina*, both widely used in African traditional medicine, have been shown to help regulate blood sugar and blood pressure levels, yet they remain underutilised in formal medical systems due to limited research funding and lack of policy integration. National drug regulatory agencies could work with regional bodies such as the African Medicines Agency

(AMA) to develop certification and quality control standards for validated herbal treatments. Developing clinical trials and certification programs for these herbal treatments could provide affordable, locally sourced alternatives for managing chronic illnesses while preserving indigenous knowledge.

An additional critical issue is that preventive health strategies, such as diet, exercise, and stress reduction, receive little promotion because they are not profitable in the same way that pharmaceuticals are. However, prioritising prevention and holistic care can significantly alleviate the disease burden, leading to economic and social benefits. Reduced mortality rates, improved education regarding health and disease, and a population that is physically and mentally healthier would drive economic growth by lowering healthcare costs and increasing workforce productivity. With fewer people debilitated by chronic diseases, employment rates would rise, and financial burdens on families and national healthcare systems would decrease. To implement these strategies, ministries of health, in partnership with education and sports ministries, should establish publicly funded wellness programs and integrate preventive health education into school curricula. Local governments can provide community-based facilities and partner with NGOs to deliver fitness, nutrition, and stress-management workshops. Development partners such as the World Bank and the African Development Bank could allocate funding under existing health systems strengthening grants, while private insurers and employers could co-fund preventive programs as part of occupational health schemes.

Furthermore, governments should promote evidence-based approaches such as strength training to improve insulin sensitivity and reduce inflammation, essential in preventing diabetes and cardiovascular disease; cardiovascular exercise to enhance circulation, oxygenation, and immune response, reducing the risk of hypertension and obesity-related cancers; and mindfulness and meditation practices to lower stress hormones, which are linked to cancer progression and chronic disease (Greenson & Chin, 2018; Pinckard et al., 2019; Shiroma et al., 2017; Vetrivel Venkatasamy et al., 2013; Wang & Zhou, 2020; Yoo et al., 2024).

Similarly, maternal and reproductive health outcomes could be vastly improved by embracing nutrition and physical activity as essential components of prenatal care. Tanzania's maternal health initiative, which introduced community-led nutrition programs and expanding access to healthcare, successfully reduced pregnancy-related complications by 35% (Gates Foundation, 2025; CDC, 2024). Expanding such programs across Africa would require joint coordination among ministries of health, of women's affairs, and local governments, supported by donor agencies such as UNICEF and UNFPA. Such partnerships could lower maternal and infant mortality rates, particularly in rural areas where access to hospitals and specialised prenatal care is limited. Knowing that there are accessible and culturally familiar healthcare options would reduce the fear and anxiety associated with seeking medical treatment, which could lead to better mental health and stronger community engagement in healthcare initiatives.

Holistic health approaches also offer significant economic benefits. Encouraging nutrient-rich diets and a shift away from processed, imported foods would stimulate demand for locally grown produce, thereby strengthening small-scale agriculture and local food industries. This would not only enhance national food security but also create employment opportunities and sustainable economic growth. Implementing policies such as taxing unhealthy processed foods and subsidising organic, locally sourced goods — similar to South Africa's sugar tax, which reduced sugary drink consumption by 28% — would incentivise healthier consumer choices while supporting local farmers and businesses (Boysen et al., 2019; Laar, 2021; Stacey et al.,

2017; University of Reading, 2025). Local markets should also be prioritised and supported through economic policies that favour small-scale farmers producing high-quality, nutrient-dense foods over industrialised, highly processed alternatives. Governments can subsidise organic, indigenous crops while restricting harmful food imports, thereby ensuring that healthy eating becomes both accessible and affordable for all communities. Again, by integrating healthy lifestyle promotion into economic planning, African nations could lower the burden of preventable diseases, reduce healthcare costs, and build a more resilient workforce, ultimately enhancing national productivity and long-term economic development.

The current healthcare model in Africa is predominantly reactive, focusing on treating diseases after they develop rather than preventing them from occurring. A fundamental shift in public health messaging is needed, one that prioritises education on proactive wellness strategies and ensures that healthcare budgets allocate as much funding to prevention as to treatment. Schools should integrate comprehensive health education into curriculums from an early age, teaching children about nutrition, the benefits of exercise, stress management, and the importance of regular health check-ups. Importantly, Africa is uniquely positioned to lead the way in holistic health, given its abundant access to fresh organic food, sunlight, and outdoor spaces. Studies show that regular exposure to sunlight enhances vitamin D levels, which is crucial for immune function, mental health, and reducing the risk of several cancers (Mead, 2008; Raymond-Lezman & Riskin, 2023; NCI, 2023). Unlike heavily urbanised regions where outdoor physical activity is limited, many African communities have vast open spaces that can be used to promote exercise and wellness programs.

However, urbanisation and corporate marketing of processed foods are shifting dietary habits away from traditional, nutrient-rich African foods toward unhealthy, high-sugar, and low-nutrient alternatives. This trend must be reversed through education programs that emphasise the value of local, organic produce and traditional cooking methods. Schools should teach children how to make healthier food choices, incorporating hands-on nutrition programs and sustainable agriculture lessons to foster lifelong healthy habits. To fully realise the benefits of integrating traditional medicine, lifestyle-based interventions, and modern healthcare, several key policy reforms must be implemented at these multiple levels. An example, which provides a roadmap for Africa, is China's successful integration of Traditional Chinese Medicine (TCM) into hospital settings. In China, TCM is widely accepted and incorporated into primary care, with patients having the option to receive herbal treatments, acupuncture, and dietary therapy alongside conventional medical interventions (Jia et al., 2024; Marshall, 2020; Shi et al., 2020). African nations could adopt a similar model, ensuring that traditional healers and herbal remedies are scientifically validated and formally included in healthcare policies. The success of China's integration of TCM into hospital settings demonstrates that modern and traditional medicine can work together to provide comprehensive, culturally relevant, and effective care.

7. Rethinking IP Rights: Unlocking Access to Essential Medicines in Africa

At the core of limited access to and affordability of medication in Africa is the global intellectual property (IP) regime, governed by agreements such as TRIPS under the WTO which was introduced earlier. These agreements grant pharmaceutical companies exclusive rights to manufacture and sell patented drugs for at least 20 years, which limits the production of generic alternatives and makes essential treatments prohibitively expensive for many African countries. While TRIPS do include legal flexibilities intended to protect public health, these mechanisms remain underutilised, particularly in Africa. Specifically, compulsory licensing allows governments to authorise the production or importation of generic versions of patented

medicines without the consent of the patent holder, typically in exchange for a royalty payment. Similarly, parallel importation enables countries to procure patented medicines from international markets where they are sold at lower prices, thereby bypassing domestic monopoly pricing. In principle, these tools provide a legal pathway for improving medicine affordability and access. However, African nations have struggled to utilise these flexibilities effectively due to a combination of legal, economic, and political barriers. Legally, many countries lack robust IP frameworks or the technical expertise required to navigate the complex procedural requirements associated with issuing compulsory licences or implementing parallel importation policies. Economically, limited domestic pharmaceutical manufacturing capacity and weak supply-chain infrastructure constrain the ability to produce or distribute generic medicines even when licences are granted. Politically, governments often face external pressure from high-income countries and multinational pharmaceutical companies, as well as constraints imposed by “TRIPS-plus” provisions in bilateral trade agreements, which can discourage the use of these flexibilities. In principle, each country must have its own domestic production capacity to manufacture generic drugs under licence, and one country’s compulsory licence does not automatically permit another to import its generics. Although a mechanism known as the “Paragraph 6 system” was established in 2003 to allow countries without manufacturing capacity to import generic medicines from others, it has proven extremely cumbersome. Indeed, it has only been successfully invoked once, when Rwanda imported the antiretroviral drug Apo-TriAvir from Canada’s Apotex in 2008 (WTO, 2008). This complexity has deterred further use, effectively rendering the system impractical for most LMICs. To address this limitation, African nations should pursue regional approaches to compulsory licensing through the African Continental Free Trade Area (AfCFTA) and the African Medicines Agency (AMA). By establishing regional manufacturing hubs and joint licensing agreements, countries could legally share production and distribution rights, enabling more efficient access to affordable generic medicines across borders. Without such cooperative reform, Africa will remain dependent on costly foreign suppliers, leaving millions without access to essential, life-saving treatments.

Limited access to medical treatments and technologies exacerbates healthcare disparities, increases mortality rates, and weakens overall economic productivity as more women, who form a significant part of the workforce, succumb to preventable diseases. With South Africa’s presidency of the G20 and the African Union’s (AU) permanent seat in the G20, African nations now have a rare opportunity to influence global health governance and push for IP reforms that prioritise public health over profit. Reforming IP laws is a legal necessity because international law already recognises the right of states to protect public health over commercial interests. The Doha Declaration on the TRIPS Agreement and Public Health (2001) reaffirmed that WTO members have the legal right to use TRIPS flexibilities to ensure access to affordable medicines. Similarly, the International Covenant on Economic, Social and Cultural Rights (Article 12) obliges states to take steps to realise “the right of everyone to the highest attainable standard of health.” Thus, IP reform is not only a matter of policy choice but a legal obligation derived from both international and regional commitments to protect health and human rights. Reforming IP laws to facilitate local production of generic medicines, reduce drug costs, and enhance access to innovative treatments is not just a legal necessity but a moral imperative. Without decisive action, cervical cancer, one of the most preventable and treatable cancers will continue to devastate communities.

Beyond these challenges, patent evergreening presents another major obstacle to affordable medicine access in Africa. This practice allows pharmaceutical companies to extend

the life of drug patents by making minor modifications to existing formulations/therapies, such as adjusting dosages, combining compounds, or making minor chemical modifications to existing drugs, to secure additional years of market exclusivity. For example, the primary patent on the monoclonal antibody trastuzumab (brand name Herceptin) used in HER2-positive breast cancer expired in 2012. The manufacturer filed and held secondary patents on a subcutaneous formulation of the drug (rather than the original intravenous form) that are still valid into the 2030s in many LMICs (MPP, 2025). Essentially, evergreening remains effective because, although generic manufacturers are now able to produce the original formulation once the primary patent expires, pharmaceutical companies often create “patent thickets”. This is a process whereby numerous secondary patents are filed around a single medicine, covering modified formulations, dosing schedules, manufacturing processes, or delivery methods. Although the original patent on the active drug may expire, these overlapping patents can continue to block or delay generic competition for years and can create legal and regulatory uncertainty that discourage generic or biosimilar market entry. Furthermore, healthcare providers frequently transition to the newer patented formulation before generic competition emerges, reducing demand for the older version. In the case of trastuzumab, the introduction of a subcutaneous formulation offered shorter administration times and greater convenience compared to the original intravenous version, encouraging clinical uptake of the newly patented product. As a result, even after expiry of the original patent, lower-cost competitors may struggle to gain market entry, allowing pharmaceutical companies to maintain high prices and prolonged market dominance.

In South Africa, civil society groups reported ongoing secondary patents covering dosage changes or combinations of drugs such as trastuzumab that would delay generic/biosimilar entry until a later date, specifically 2027–2033 for trastuzumab, as these tactics keep essential medicines, including chemotherapy agents and newer immunotherapies, artificially expensive and out of reach for many African patients. This means that rather than allowing lower-cost biosimilars to compete once the original molecule’s patent has expired, the secondary patents keep the cost of the drug high and limit access in LMIC contexts. Several countries have historically navigated restrictive IP laws to expand access to essential medicines, offering valuable lessons for Africa. For example, India’s Patents Act of 1970 abolished product patent protection for pharmaceuticals, enabling Indian manufacturers such as Cipla to produce generic versions of life-saving drugs and transform the country into a global leader in affordable medicine production (UNDP, 2013). Notably, Cipla gained international recognition in the early 2000s for significantly lowering the cost of antiretroviral therapy for HIV treatment in LMICs. Although the introduction of TRIPS obligations now limits the ability of countries to fully replicate this approach, the Indian experience demonstrates how strategic IP policies, voluntary licensing, and patent oppositions can still be leveraged to improve access to essential medicines in LMICs. Similarly, Brazil issued a compulsory license in 2007 to import generic versions of the antiretroviral drug efavirenz after price negotiations with the patent holder failed, prioritising public health over pharmaceutical monopolies. This action successfully reduced the price of efavirenz by approximately 70%, significantly expanding access to treatment for people living with HIV and demonstrating that compulsory licensing can be an effective tool for LMICs to overcome patent-related barriers to essential medicines. Thailand also utilised compulsory licensing to authorise generic competition against the consent of pharmaceutical companies, notably for the antiretroviral drugs efavirenz in 2007 and lopinavir/ritonavir in 2008, ensuring access to essential medications for its population (Alcorn, 2007; Rosenberg, 2014). These examples demonstrate that with strong legal frameworks, decisive political action, and investment in domestic pharmaceutical production, countries can successfully override patent

barriers and increase access to critical medicines. If African nations follow these examples by reforming their patent laws, they can significantly improve access to treatments for high-burden diseases while boosting pharmaceutical sovereignty (WHO, 2024; MPP, 2024; Ragavan & Vanni, 2020; Schull, 2000; Taghavi et al., 2020).

Beyond legal reforms, African nations must utilise the AfCFTA as a strategic platform to negotiate better pharmaceutical trade agreements. A key priority should be the joint procurement of essential medicines to reduce costs and expand availability, alongside efforts to establish regional drug manufacturing hubs that can serve multiple countries. To illustrate the scale of the problem: in South Africa, the cost of cervical cancer diagnosis and treatment has been estimated at roughly R 24 997 for stage 1 and R 55 997 for stage 4 (Maleka, 2021). With such a range, even modest mark-ups translate into major barriers for patients. Indeed, studies in sub-Saharan Africa show that retail mark-ups on medicines can reach 30 %-50 % and cumulative mark-ups exceed 200 % of the landed cost (Mhlanga & Suleman, 2014; Ngozwana, 2016). An example specific for advanced or recurrent cervical cancer is the monoclonal antibody bevacizumab which has been estimated to cost more than US\$21 000 per extra month of life in LMIC settings, making it unaffordable in countries where gross national incomes per capita are often under US\$3 000. Similarly, the immune checkpoint inhibitor pembrolizumab costs approximately US\$11 700 for just one 28-day cycle in high-income settings and is even less likely to be economically accessible in African contexts (NCBI, Pembrolizumab (Keytruda), Table 3, 2022). Even with large price reductions, modelling suggests cost-effectiveness thresholds are still not met. These figures demonstrate how monopolistic pricing and patent-protected exclusivity create prohibitive cost-barriers for cervical cancer treatments in Africa, underlining the urgency for coordinated policy action (e.g., joint procurement, regulatory harmonisation, IP reform) to drive down prices and broaden access. By harmonising regulatory standards under the AfCFTA, African governments can streamline drug-approval processes, improve distribution efficiencies and thereby bring down the total cost burden to patients. Furthermore, at the global level, African leaders should push for a TRIPS waiver on a number of treatments, similar to the COVID-19 vaccine waiver proposed by India and South Africa. Proposed in 2020, the waiver aimed to allow LMICs to produce generic versions of COVID-19 vaccines and therapeutics without patent restrictions, thereby increasing supply and reducing costs (Médecins Sans Frontières, 2020; Chang, 2023; Kohler et al., 2022; Loft, 2022). Proponents argued that this was essential to ensure global vaccine equity, as wealthier nations had secured the majority of vaccine doses, leaving African and other developing nations struggling with shortages. Despite widespread support from developing countries and public health advocates, pharmaceutical companies and some high-income nations (e.g., the U.S., EU, and UK) resisted the waiver, arguing that it would discourage innovation and investment in new treatments (Kohler et al., 2022; Mchau et al., 2024). After prolonged negotiations, a limited waiver was approved in June 2022, but it only applied to vaccine patents and did not cover diagnostics or treatments, reducing its impact. However, if a TRIPS waiver was extended to cervical cancer treatments it could enable local manufacture and generic production of HPV vaccines, chemotherapies and immunotherapies, potentially lowering treatment costs by half or more. An example from one initiative, which achieved ~59 % savings on a portfolio of 26 cancer drugs in Africa/Asia (Amin & Kesselheim, 2022; Clinton Health Access Initiative, 2020). However, pharmaceutical-industry resistance, regulatory-capacity constraints and global-trade negotiations at the WTO remain major hurdles. Strong advocacy from African governments, alongside investment in domestic

manufacturing and supply-chain infrastructure, will be required if the AfCFTA strategy is to result in affordable access to life-saving cervical cancer treatments across the continent.

8. From Pilot to Policy: A Scalable Model for Broader Healthcare Solutions

While this discussion has focused on cervical cancer, the structural weaknesses in Africa’s healthcare system — limited healthcare infrastructure, weak pharmaceutical supply chains, poor public health education, cultural hesitancy, and the dominance of profit-driven pharmaceutical companies — are challenges that affect many other preventable diseases. For instance, breast cancer is now the most commonly diagnosed cancer in Africa, amongst both men and women, with ~186 598 new cases recorded in 2020 and incidence rising rapidly (Figure 4) (Anyigba et al., 2021). However, it remains largely untreated due to a lack of screening programs and affordable therapies. Similarly, non-communicable diseases are surging: in the African Region, diabetes affects ~10.5 % of adults (2022) and hypertension’s pooled prevalence is ~28.5 % among adults, while cardiovascular disease is the largest component of NCD deaths (Barry et al., 2025). Furthermore, the lack of health literacy and limited awareness of holistic preventive approaches to disease prevention such as traditional medicine, nutritional therapy, and physical activity, means many people seek costly pharmaceutical treatments after disease progression rather than preventive care (Lordan & Grant, 2023; WHO, 2025; Sun et al., 2024).

Most common site per country, Absolute numbers, Incidence, Both sexes, in 2022 (excl. NMSC)

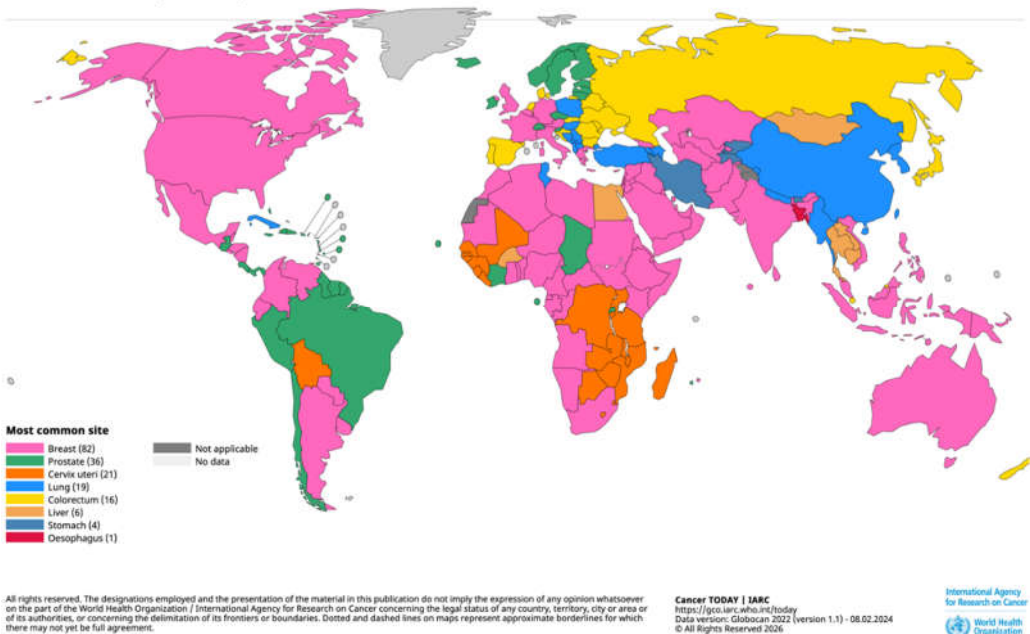


Figure 4. Global map of the most diagnosed cancer types by country based on absolute incidence numbers (excluding non-melanoma skin cancer). Data obtained from GLOBOCAN 2022 via the IARC Cancer Today platform (*Global Cancer Observatory*).

In summary, despite 80% of Africans using traditional medicine, and instead of leveraging the trust and accessibility of traditional healers, modern healthcare systems have often sidelined them, missing an opportunity to bridge the gap between medical science and community-based healthcare. By partnering with traditional healers, governments could improve early disease detection, increase community trust in modern medicine, and encourage the use of holistic, culturally accepted treatments alongside evidence-based medical care. At the same time, pharmaceutical corporations' focus on profit rather than public health continues to drive medicine prices beyond the reach of most Africans. Companies use patent monopolies and evergreening tactics to extend exclusive rights on drugs, keeping generic alternatives off the market and prioritising financial gains over saving lives. Without reforms that prioritise public health over corporate interests, Africa will remain dependent on expensive imported medicines while millions continue to die from preventable and treatable diseases. The solutions proposed in this essay — local pharmaceutical production, digital health expansion, traditional and holistic treatment integration, education, and public health policy reform — must be scaled beyond cervical cancer. If these strategies are implemented, they will not only reduce mortality rates for a single disease but also strengthen Africa's entire healthcare system, build a more resilient workforce, ultimately enhancing national productivity and long-term economic development, and allow it to better respond to future health crises and NCDs alike.

9. Conclusion: A Blueprint for African-led Healthcare Innovation

For true transformation, African nations must use their growing influence in global governance, particularly through the G20 and AU, to demand policy reforms that favour equitable healthcare access. Governments must also invest in community-based education programs to empower people with knowledge of disease prevention, lifestyle medicine, and early screening. Public-private collaborations should fund local pharmaceutical manufacturing, innovation in healthcare delivery, and partnerships with traditional healers, ensuring culturally relevant, accessible, and affordable care for all. By addressing cervical cancer as a starting point, Africa can create a roadmap for improving healthcare access across multiple diseases, reducing health disparities between African nations and high-income countries, and moving towards a self-sufficient, resilient, and equitable healthcare system. The time to act is now. Through bold policy decisions, investment in local solutions, and a commitment to holistic healthcare, African nations can break the cycle of medical dependence and build a healthcare system that truly serves its people.

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Africa's Migration: Redrawing Borders and Building Unity

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Abstract: Forced migration in Africa is more than a humanitarian crisis; it reshapes political, economic, and social structures by altering identities, redrawing borders, and challenging governance. This paper examines the historical roots of displacement, from precolonial mobility systems to disruptions caused by colonial-era borders and postcolonial state formation and analyses the political and economic shifts driven by migration. It explores security risks, opportunities for regional cohesion, and the role of the African Union's Protocol on the Free Movement of Persons (FMP) in fostering integration. Through historical analysis, case studies from South Sudan, the Democratic Republic of Congo (DRC), and Kenya, and a legal and policy review, this study argues that Africa must transition from viewing forced migration as a destabilising force to recognising its potential to drive mobility, innovation, and unity. To achieve stability and prosperity, Africa must shift from restricting mobility to harnessing it for development and resilience. A border is just a line on a map until people are forced to cross it; then it becomes a question of survival, identity, and power. Borders define states, but people shape civilisations. The true test of Africa's future lies in how it embraces those forced to move.

Keywords:

1. Migration
2. Mobility
3. Displacement
4. Borders
5. Integration

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1. Introduction

Migration has long been a defining feature of African societies and a central mechanism through which economic systems, political authority, and social identities were formed. Before colonial intervention, mobility across regions facilitated trade, cultural exchange, and political organisation, producing interconnected communities whose identities were not confined to fixed territorial boundaries. Movement enabled access to grazing land, water, markets, and kinship networks, allowing societies to adapt to ecological variability and shifting economic

conditions. Rather than being viewed as disruptive, mobility was embedded within social norms and governance arrangements that regulated access to resources, mediated conflict, and sustained cohesion across wide geographic spaces (Herbst, 2000, pp. 35–38).

This long-standing relationship between mobility and social organisation was fundamentally disrupted during the colonial period. European imperial expansion introduced rigid territorial boundaries that prioritised administrative control and resource extraction over existing social and economic systems. Colonial administrations sought to regulate movement in order to facilitate taxation, labor control, and political surveillance, redefining mobility as a problem to be governed rather than a resource to be sustained (Mamdani, 1996, pp. 18–22). The borders formalized during the 1884–85 Berlin Conference disregarded ethnic, linguistic, and economic linkages, fragmenting communities whose livelihoods depended on cross regional movement. Migration, once normalized, was recast as a source of disorder and political tension, closely tied to emerging notions of sovereignty and territorial control (Herbst, 2000, pp. 58–62).

Following independence, most African states retained these colonial borders in the interest of political stability and territorial sovereignty. The decision to preserve inherited boundaries reflected concerns that reopening border questions could trigger widespread interstate conflict. While this approach contributed to relative territorial stability, it also entrenched governance frameworks that were poorly aligned with social realities on the ground. Restrictive citizenship regimes and migration controls constrained mobility across historically fluid spaces, redefining belonging in narrow legal terms (Mamdani, 1996, pp. 23–27). As a result, many Africans today encounter legal and political barriers when seeking livelihoods, safety, or social recognition beyond the boundaries of their states of origin. Migration increasingly became associated with illegality and insecurity rather than adaptation and resilience, reinforcing exclusionary practices within postcolonial states.

By situating contemporary migration within this historical context, it becomes clear that modern displacement is not solely a product of conflict or environmental stress, but also a legacy of colonial-era disruptions to mobility, social cohesion, and governance structures. Understanding these historical drivers is crucial to designing policies that transform migration from a source of marginalisation into an opportunity for regional integration, innovation, and stability.

1.1. Historical Context of Migration in Africa

Pre-colonial African societies were characterised by diverse patterns of mobility shaped by ecological conditions, economic specialization, and social organization. Seasonal migration allowed farming communities to respond to rainfall variability, while pastoral mobility enabled herding populations to sustain livestock across arid and semi-arid regions. Long-distance trade networks linked interior regions to coastal and trans-Saharan routes, facilitating the circulation of goods, ideas, and political influence over extended territories (Herbst, 2000, pp. 40–45). Communities such as the Somali, Fulani, Tuareg, and Maasai relied on movement across vast spaces to maintain livelihoods, social relations, and political authority. In these contexts, belonging was layered and flexible, allowing individuals to maintain multiple affiliations simultaneously.

Political authority in many pre-colonial societies was similarly adaptive. Governance often operated through overlapping systems of authority that accommodated movement rather than restricting it. Access to land and resources was regulated through customary institutions, negotiated arrangements, and kinship networks rather than fixed territorial ownership. These arrangements allowed populations to adapt to environmental stress and economic change

while limiting large-scale conflict. Mobility thus functioned as a stabilizing force within social and political systems rather than a destabilising one (Herbst, 2000, pp. 91–95).

Colonial rule disrupted these systems by introducing fixed territorial sovereignty, centralised administration, and exclusionary notions of citizenship. European colonial authorities sought to immobilise populations to enforce labour regimes, taxation systems, and administrative control. Borders divided single communities across multiple colonial territories, undermining established mechanisms of resource sharing and dispute resolution. The resulting disjuncture between imposed territorial governance and lived social realities embedded structural tensions that would later manifest as displacement, contested belonging, and conflict (Mamdani, 1996, pp. 28–32).

In the post-independence era, African governments largely reaffirmed colonial boundaries under the principle of “*uti possidetis*”, prioritising territorial integrity over mobility. While this principle reduced the likelihood of border wars, it also institutionalised rigid distinctions between citizens and non-citizens that failed to reflect historical patterns of movement. Legal frameworks governing nationality and residence often reproduced colonial exclusions, marginalizing populations whose economic and social lives extended beyond national borders (Adepoju, 2008, pp. 4–6). Over time, the gap between formal territorial governance and everyday mobility widened, creating conditions in which migration became associated with illegality, marginalization, and social vulnerability rather than integration.

1.2. Current Migration Challenges

Contemporary migration in Africa is shaped by the convergence of armed conflict, environmental stress, and economic exclusion. Protracted conflicts, such as the Sudan civil war since 2023, the South Sudan conflict since 2013, the Democratic Republic of Congo (DRC) armed conflict, which intensified since 2017, and the Tigray conflict in Ethiopia from 2020–22, with ongoing regional impacts, have displaced millions of people. Climate-related pressures such as droughts, floods, and desertification continue to undermine rural livelihoods. In many contexts, declining agricultural productivity, competition over land and water, and weak governance structures erode the viability of remaining in place, compelling households to migrate as a strategy of survival (UNHCR, 2023a, pp. 12–15).

Forced migration refers to population movements in which individuals are compelled to leave their habitual residences due to threats such as conflict, persecution, environmental disasters, or severe economic collapse. Refugees are persons who cross international borders to escape violence or persecution and are protected under international law, while internally displaced persons remain within their countries of origin but face comparable vulnerabilities. Although not all migrants affected by adverse conditions fall within formal legal categories, the defining feature of forced displacement is the absence of meaningful alternatives (IOM, 2023, pp. 21–24).

Africa currently faces a structural paradox in migration governance. On the one hand, continental initiatives such as the African Continental Free Trade Area (AfCFTA) promote the free movement of goods and capital as a pathway to integration and growth. On the other hand, the movement of people remains heavily restricted, reflecting state concerns over security, employment, and sovereignty. This asymmetry undermines regional integration by limiting labor mobility and reinforcing informal migration pathways, exacerbating what can be described as a scramble for belonging among displaced and mobile populations (Adepoju, 2008, pp. 10–12).

Efforts to address migration through containment and border control have proven insufficient to address these challenges. Restrictive policies often divert migration into informal and dangerous routes, increasing exposure to exploitation, trafficking, and violence. At the same time, host communities, particularly in low-income and fragile settings, experience pressure on public services and labour markets. These pressures are frequently politicised, fueling resentment and xenophobia and deepening social divisions rather than fostering integration (UNHCR, 2023b, pp. 33–36).

To effectively address these migration challenges, African states and regional organisations must acknowledge the historical legacies of colonial borders and exclusionary governance that continue to shape mobility today. Policies should shift from securitisation and restriction toward frameworks that recognise mobility as a resource for economic development, social cohesion, and regional integration. Harnessing migration for innovation, knowledge transfer, and labor mobility can transform displacement from a source of vulnerability into an opportunity for shared development and stability.

This paper situates forced migration within these historical and contemporary dynamics, arguing that migration is neither inherently destabilising nor automatically beneficial. Its consequences depend on how mobility is governed and how inclusion is negotiated within political and institutional frameworks. By examining how forced migration is reshaping Africa's political, economic, and social landscapes, the paper explores whether existing governance approaches can move beyond exclusion and securitisation toward models that support stability, regional integration, and shared development.

2. Redrawing Africa's Map

Forced migration in Africa is not merely a humanitarian consequence of conflict and crisis. It is an active force reshaping political boundaries, demographic configurations, and regional power relations. Large-scale displacement alters how borders function in practice, how citizenship is negotiated, and how sovereignty is exercised. Borders that were originally designed to fix populations within territorial units are increasingly experienced as porous, contested, and selectively enforced. In the African context, this reality extends to the right to move, belong, and redefine political and social spaces, even within borders that were not drawn by Africans themselves. Redrawing Africa's map, therefore, is not about erasing history but about reimagining political and social arrangements to reflect lived realities, foster cohesion, and build unity across communities that colonial boundaries artificially divided. In this sense, migration not only reflects instability but actively participates in the reconfiguration of political space across the continent (Andreas, 2003, pp. 82–85). Today, this calls for unity, as Kwame Nkrumah asserted, "We must unite now or perish" (Nkrumah, 1963). This emphasises the necessity of coordinated responses to migration pressures and the reshaping of Africa's political and social landscapes.

Across Africa, forced migration has transformed borders from administrative lines into zones of negotiation, control, and survival. In some contexts, borders function as sites of exclusion and containment, while in others they become spaces of economic exchange and social continuity. These transformations affect relations between neighbouring states, particularly where displacement flows are protracted and transboundary. As populations move in response to violence, environmental stress, and economic marginalisation, the governance, function, and lived experience of borders are increasingly determined by patterns of human mobility rather than by formal legal demarcation alone.

2.1. Conflict-Driven Migration

South Sudan's trajectory illustrates how displacement and state formation have become deeply intertwined. Prior to and following independence in 2011, prolonged civil war, political fragmentation, and elite competition triggered repeated waves of displacement (Johnson, 2016, pp. 112–118). Millions of South Sudanese fled to neighboring Uganda, Kenya, Sudan, and Ethiopia, fundamentally altering demographic patterns across the region. Refugee hosting areas expanded rapidly, placing sustained pressure on land, public services, and local governance structures within host states (UNHCR, 2023b, pp. 41–44).

Although South Sudan emerged as the world's newest state, its borders remained fragile and contested. Territorial sovereignty was shaped less by effective governance than by the movement of people escaping violence. Displacement weakened state authority in peripheral regions and complicated efforts to consolidate political control. External actors, including neighboring governments and international partners, pursued strategic and humanitarian interests that further entangled migration with regional geopolitics. In this context, displacement was not simply an outcome of conflict but a factor that influenced peace negotiations, regional diplomacy, and resource allocation.

In the Democratic Republic of Congo (DRC), forced migration is inseparable from long-standing disputes over citizenship and belonging. The experience of the Banyarwanda population in eastern Congo highlights how colonial era policies institutionalized ethnic hierarchies that continue to structure contemporary conflict (Newbury, 2011, pp. 146–150). Contestation over land rights, nationality, and political inclusion has driven repeated cycles of violence, displacing communities and undermining prospects for durable return. Migration in eastern Congo is therefore both a consequence of insecurity and a mechanism through which insecurity is reproduced.

Armed groups operating in the region exploit unresolved identity claims and weak state presence, drawing on displaced populations for recruitment, taxation, and control. The persistence of displacement erodes trust between communities and the state, complicating peace building efforts and regional cooperation. Despite multiple peace initiatives and international interventions, deep-rooted mistrust among local communities and neighboring states continues to undermine stability, ensuring that displacement remains embedded within broader conflict systems.

Further north, Libya has emerged as both a gateway and a graveyard within Africa's migration landscape. Its geographic position has made it a central transit point for migrants moving toward Europe, while prolonged state collapse has exposed migrants to severe abuses (Lutterbeck, 2018, pp. 540–543). Detention centers, often operating with minimal oversight, have become sites of exploitation, forced labor, and violence. Migrants are subjected to practices that blur the line between migration management and systematic abuse.

European policies that externalize border control to Libyan authorities have intensified these dynamics by prioritizing containment over protection. As a result, Libya's borders function less as regulatory spaces and more as zones of extraction and coercion. This case demonstrates how African migration routes are shaped not only by internal dynamics but also by external geopolitical interests, reinforcing unequal power relations that redefine how borders are governed and experienced.

2.2. Climate Change and Resource Pressures

Beyond armed conflict, environmental stress has become a significant driver of displacement across Africa. Climate-induced migration is particularly pronounced in regions where livelihoods depend heavily on land and water resources. In the Sahel, desertification, soil degradation, and prolonged drought have reduced agricultural productivity and pasture availability, pushing pastoralist communities southward into farming areas (Homer–Dixon, 1999, pp. 73–76). These movements intensify competition over scarce resources and strain traditional systems of conflict resolution.

The conflict between Fulani herders and farming communities in Nigeria illustrates how climate stress intersects with identity, governance failures, and historical grievances. As grazing routes shrink and water sources become scarce, migration becomes both a survival strategy and a trigger for violence. State responses have often been fragmented and securitized, focusing on military deployment rather than mediation or resource governance. Similar dynamics are evident in Mali and Chad, where environmental degradation compounds political instability and armed mobilization (ICG, 2023, pp. 6–9).

Climate change does not operate as an isolated cause of migration. Instead, it acts as a multiplier that intensifies existing vulnerabilities related to poverty, weak governance, and social exclusion. Displacement driven by environmental stress reshapes borders by increasing cross-regional mobility, altering settlement patterns, and complicating state efforts to manage territory and populations. These processes challenge conventional distinctions between environmental and conflict-driven migration, revealing their deep interconnection.

2.3. Border Militarization

As migration pressures grow, African states have increasingly turned toward border securitization as a governance response. Governments in countries such as Kenya, South Africa, and Morocco have invested in surveillance infrastructure, border fencing, and security deployments, often with financial and technical support from external actors (Frowd, 2018, pp. 121–125). These measures are commonly justified in the language of national security, counterterrorism, and crime prevention, framing migration as a threat to be contained.

Rather than reducing migration, border militarization frequently diverts movement into more dangerous and irregular routes. Migrants are pushed toward smugglers and traffickers, increasing exposure to exploitation and life-threatening conditions (Bigo, 2002, pp. 69–72). Restrictive border regimes also reinforce the marginalization of displaced populations by criminalizing mobility while leaving the structural drivers of movement unaddressed. The absence of a continent-wide commitment to free movement reflects the continued dominance of state-centric sovereignty over regional mobility aspirations.

At the same time, migration reshapes social and political identities across borders. Transnational communities sustained by shared language, kinship, and economic networks challenge rigid notions of citizenship and belonging. These communities facilitate trade, remittances, and information flows that connect multiple states simultaneously (Vertovec, 2009, pp. 13–17). While such networks can enhance regional integration, they can also provoke backlash in host societies, particularly during periods of economic stress and political uncertainty.

In South Africa, repeated outbreaks of xenophobic violence illustrate how migration intersects with unemployment, inequality, and political frustration. Migrants are frequently scapegoated for structural economic problems despite limited evidence that they are primary drivers of job losses or service shortages (ILO, 2023, pp. 58–61). Similar tensions exist elsewhere on the continent, where weak service provision and governance failures heighten resentment

toward newcomers. These dynamics demonstrate that forced migration redraws borders not only geographically, but also socially and politically, redefining who belongs and under what conditions.

To contextualize how forced migration reshapes borders, population distribution, and regional governance across Africa, Table 1 provides a comparative overview of displacement patterns, drivers of movement, and associated governance implications across key regions of the continent.

Table 1. Comparative Overview of Forced Migration Patterns in Africa

Region	Estimated Displaced Population	Primary Drivers of Movement	Dominant Type of Movement	Main Host Countries or Areas	Key Governance and Security Implications
Horn of Africa	Over 18 million displaced	Armed conflict, political instability, drought, and food insecurity	Refugees and internally displaced persons	Uganda, Kenya, Ethiopia, Sudan	Protracted displacement strains host state capacity, regional security cooperation is required, and borders are increasingly securitized
Great Lakes Region	Over 15 million displaced	Citizenship disputes, armed groups, and land conflicts	Internally displaced persons and cross-border refugees	Uganda, Rwanda, Burundi, Tanzania	Regionalized conflict systems, contested nationality, and challenges to post-conflict reconstruction
Sahel	Over 10 million displaced	Climate stress, desertification, insurgency, and weak governance	Mixed forced and survival migration	Niger, Burkina Faso, Mali, Nigeria	Climate conflict nexus intensifies insecurity, displacement fuels recruitment into armed groups
North Africa	Over 5 million migrants and displaced persons	State collapse, conflict, transit migration	Transit migration and refugees	Libya, Tunisia, Egypt	Externalized border control, severe human rights risks, and geopolitical pressure from Europe
Southern Africa	Over 6 million migrants and displaced persons	Armed conflict, political instability, drought, and food insecurity	Refugees and internally displaced persons	South Africa, Botswana, Namibia	Xenophobia, urban pressure, securitization of migration discourse
East Africa Urban Centers	Millions of urban displaced populations	Conflict displacement, economic exclusion	Urban refugee and informal settlement growth	Nairobi, Kampala, Addis Ababa	Informal economies expand, pressure on housing and services, and integration challenges

3. Economic and Social Impacts of Forced Migration

Forced migration is often framed primarily as a humanitarian emergency or a security concern, leading to policy responses that emphasize relief, containment, or control. Within this framing,

displaced populations are frequently portrayed as economic burdens that strain public services, depress wages, and exacerbate social tensions in host communities. While such pressures are real, particularly in low-income and fragile states, this perspective obscures the more complex and dynamic economic and social effects of forced migration. Across Africa, displacement has simultaneously generated constraints and opportunities, reshaping labor markets, urban economies, and social relations in ways that require more nuanced analysis (World Bank, 2020b, pp. 3–6).

Forced migration alters economic systems not only through the immediate demand it places on host communities but also through longer-term processes of adaptation, entrepreneurship, and integration. Displaced populations often arrive with limited assets and legal protection, yet over time, they develop strategies to sustain livelihoods within constrained environments. These strategies interact with local economies, sometimes reinforcing existing inequalities but also creating new forms of economic activity. Understanding the economic and social impact of forced migration, therefore, requires moving beyond short-term cost assessments toward an examination of how mobility reshapes production, exchange, and social organization.

3.1. Economic contributions

Displaced populations across Africa have demonstrated considerable resilience and adaptability, often contributing to local economies despite operating under restrictive legal and social conditions. One of the most frequently cited examples is the Somali refugee and migrant community in Eastleigh, Nairobi. Over several decades, Eastleigh evolved into a major commercial hub driven largely by Somali entrepreneurs who established extensive trade networks linking East Africa with the Middle East and Asia (Foster, 2019, pp. 291–94). These networks supported wholesale and retail trade, facilitated access to imported goods, and generated employment opportunities for both migrants and Kenyan citizens. In this context, forced migration became intertwined with urban economic transformation.

Beyond urban commerce, migration has played a significant role in sustaining regional trade networks across Africa. In West Africa, migrants from Nigeria, Ghana, and Côte d'Ivoire have long facilitated the circulation of agricultural produce, textiles, and consumer goods across borders, particularly within informal and semi-formal markets (Adepoju, 2008, pp. 15–18). These trading systems are especially important in contexts where formal employment remains limited, and state regulation is weak. Migrant traders often act as intermediaries between rural producers and urban consumers, contributing to food security and market integration across national boundaries.

Remittances further underscore the economic significance of migration. Financial transfers from migrants to households in countries of origin provide income support that can reduce poverty, smooth consumption, and finance education and healthcare. In several African countries, remittances constitute a significant share of household income and national foreign exchange earnings (World Bank, 2020a, pp. 7–9). Even when migrants are forcibly displaced, remittance flows can persist over time as individuals establish new livelihoods, illustrating the long-term economic linkages created by mobility.

At the same time, the economic impact of forced migration is uneven and highly context-dependent. Host countries with limited fiscal capacity often struggle to expand infrastructure, healthcare, education, and housing to accommodate large inflows of displaced populations. Uganda's relatively progressive refugee policies, which allow refugees to work, move freely, and access public services, illustrate both the opportunities and the constraints associated with hosting large refugee populations (UNHCR, 2023b, pp. 52–55). While refugees contribute to local markets, agricultural production, and service provision, the scale of displacement places

sustained pressure on land availability, public budgets, and local governance. These realities complicate claims that migration automatically generates economic benefits and highlight the central role of institutional capacity in shaping outcomes.

3.2. Social Impacts

Beyond economics, forced migration profoundly reshapes social relations, collective identities, and notions of belonging. Migration facilitates cultural exchange and social interaction, particularly in urban centers where diverse populations live and work in close proximity. Cities such as Nairobi, Kampala, and Johannesburg have been transformed by migrant communities whose languages, cuisines, religious practices, and social norms contribute to evolving urban cultures (Vertovec, 2009, pp. 19–22). These interactions can foster social dynamism and innovation, expanding cultural repertoires and social networks within host societies.

In some contexts, forced migration has supported social integration and cooperation between displaced populations and host communities. In Uganda, refugees from South Sudan and the Democratic Republic of Congo (DRC) have settled alongside local populations, participating in shared economic activities and social institutions. Access to land and the right to work have, in certain areas, reduced competition and enabled collaborative livelihoods, fostering coexistence rather than conflict (Crisp, 2004, pp. 12–15). Migrant communities can also function as social bridges, maintaining transnational ties that connect host societies to broader regional and global networks. However, social integration is neither automatic nor guaranteed. Rapid demographic change can intensify anxiety over employment, housing, and access to public services, particularly in urban areas characterized by high unemployment and inequality. These pressures are frequently politicized, with migrants framed as competitors or threats rather than as participants in shared economic systems. South Africa provides a stark illustration, where recurrent episodes of xenophobic violence reflect deeper frustrations related to inequality, unemployment, and limited state capacity (ILO, 2023, pp. 58–61). Migrants, especially those without secure legal status, become visible targets during periods of economic and political stress, reinforcing exclusion rather than cohesion.

Forced migration also raises complex questions about cultural preservation and identity. While cultural hybridization can enrich societies, it may also generate fears of cultural erosion among smaller or historically marginalized communities. Groups such as the San, the Dogon, and pastoralist societies across the Sahel face the risk that displacement and assimilation may weaken linguistic, cultural, and social traditions that are central to collective identity (Cohen, 2021, pp. 84–87). These concerns complicate normative assumptions that diversity and multiculturalism are always unproblematic, underscoring the need to balance integration with respect for cultural autonomy and self-determination.

Taken together, the economic and social impacts of forced migration resist simple categorization as either positive or negative. Forced migration can stimulate entrepreneurship, trade, and cultural exchange, while simultaneously intensifying competition over resources and challenging social cohesion. The outcomes depend less on migration itself than on the institutional, political, and economic frameworks that govern mobility and mediate inclusion within host societies. Effective migration governance therefore plays a decisive role in determining whether forced displacement contributes to resilience and shared development or to exclusion and social fragmentation. “It is clear that we must find an African solution to our problems, and that this can only be found in African unity. Divided we are weak; united, Africa could become one of the greatest forces for good in the world” (Nkrumah, 1963).

4. Security Risks of Forced Migration

Large scale forced migration in Africa presents significant security challenges for both countries of origin and host states. These challenges do not arise from mobility itself, but from the interaction between displacement, weak governance, resource scarcity, and political exclusion. In regions affected by protracted conflict and environmental stress, forced migration can intensify existing tensions, strain institutional capacity, and contribute to cycles of violence. Security responses that focus narrowly on containment and militarization frequently exacerbate these risks by deepening human insecurity and undermining social cohesion rather than addressing the structural causes of displacement (Bigo, 2002, pp. 65–68).

Forced migration alters security landscapes by redistributing populations across fragile political and economic environments. Sudden population movements can overwhelm local institutions that already lack the capacity to provide security, basic services, and dispute resolution. Where governance systems are weak, displacement amplifies grievances related to access to land, employment, and political representation. These pressures create conditions in which insecurity is reproduced, not only through violence but also through chronic instability and institutional erosion.

4.1. Conflict Triggers

Forced migration frequently functions as a conflict multiplier by aggravating preexisting political, social, and economic tensions. In contexts where governance structures are fragile, the sudden arrival of large displaced populations can disrupt livelihoods, strain local service provision, and intensify competition over land, water, and employment. These dynamics are particularly visible in the Sahel, the Horn of Africa, and parts of Central Africa, where displacement intersects with violent extremism, organized crime, and long-standing underdevelopment (Florquin and Berman, 2005, pp. 41–44).

Displaced populations, especially young people facing prolonged unemployment, limited education, and uncertain legal status, often inhabit environments characterized by insecurity and exclusion. In such contexts, armed groups exploit vulnerability by offering protection, income, or a sense of belonging. Boko Haram and Al Shabaab have capitalized on displacement dynamics by recruiting among populations affected by conflict and environmental stress, drawing on grievances linked to marginalization and state neglect (Campbell, 2013, pp. 29–33; Botha and Abdile, 2014, pp. 8–11). The availability of small arms and the porosity of borders further intensify these processes, enabling armed actors to operate across national boundaries with relative ease.

The Democratic Republic of Congo (DRC) illustrates how forced migration can both result from and contribute to insecurity. Prolonged displacement undermines local governance by weakening administrative authority, fragmenting community structures, and disrupting customary mechanisms of conflict resolution. As displaced populations move across provinces and into neighboring states, conflict dynamics become increasingly regionalized, drawing in external actors and complicating peace efforts (Newbury, 2011, pp. 158–162). In such settings, forced migration is not merely a symptom of insecurity but an integral component of conflict systems that perpetuate violence and instability.

Importantly, the security risks associated with displacement are not inherent to displaced populations themselves. Rather, they emerge from prolonged exclusion, lack of legal protection, and limited access to livelihoods. Where displaced people are denied rights and opportunities, insecurity becomes more likely. This distinction is critical, as policies that conflate migration with insecurity risk reinforcing the very conditions that armed actors exploit.

4.2. Border Policies

In response to perceived security threats, many African states have increasingly securitized their borders. This trend has been reinforced by external actors who provide funding, surveillance technologies, and technical assistance for border management. Libya, Kenya, South Africa, and Morocco have expanded border patrols, surveillance systems, and detention practices, framing migration as a matter of national and regional security (Andreas, 2003, pp. 90–93; Frowd, 2018, pp. 127–130).

While securitization is intended to assert state control, it often produces severe humanitarian and security consequences. Migrants and refugees are pushed toward irregular routes that expose them to trafficking, exploitation, and violence. Detention practices, particularly in transit countries such as Libya, have been associated with widespread human rights abuses, including forced labor, torture, and sexual violence (Lutterbeck, 2018, pp. 543–546). Such practices undermine international and regional commitments to refugee protection and erode the legitimacy of state authority.

The securitization of migration also risks destabilizing regional relations. Militarized borders can heighten tensions between neighboring states, particularly where displacement flows are transboundary and protracted. In the Horn of Africa, border closures and security operations have complicated cooperation among Ethiopia, Eritrea, Somalia, and Sudan, limiting the effectiveness of regional responses to shared security challenges (Mulugeta, 2014, pp. 150–153). Fragmented national approaches to border control reduce information sharing and weaken collective capacity to manage displacement.

African regional institutions have attempted to address these risks through cooperative security frameworks. The Intergovernmental Authority on Development (IGAD), the Economic Community of West African States (ECOWAS), and the African Union (AU) have deployed peace operations, facilitated mediation, and promoted policy coordination. These efforts reflect recognition that forced migration and insecurity are regional challenges that cannot be addressed unilaterally. However, their effectiveness remains constrained by limited resources, uneven political commitment, and divergent national priorities (Dzimiri, 2020, pp. 224–227).

Ultimately, treating migration primarily as a security threat obscures its underlying drivers and undermines long-term stability. Security strategies that fail to address conflict, political exclusion, and environmental stress are unlikely to reduce displacement. Instead, they risk deepening grievances and reinforcing cycles of insecurity. A more sustainable approach requires integrating human security, rights protection, and regional cooperation into migration governance, moving beyond militarized border controls toward frameworks that prioritize stability through inclusion. “Unite we must. Without necessarily sacrificing our sovereignties, we can forge a political union based on defence, foreign affairs and diplomacy, and a common citizenship, an African currency, a monetary zone and a central bank” (Nkrumah, 1963).

5. The Path Forward and Conclusion

5.1. Path Forward

Africa's migration challenge lies not in mobility itself, but in the conditions under which mobility occurs and is governed. Across the continent, millions of people are compelled to move because conflict, environmental stress, and economic exclusion leave them with no viable alternatives. The concept of forced belonging captures this condition by describing situations in which individuals are displaced from their homes yet denied meaningful rights, recognition, and long-

term security in places of refuge. Under such conditions, movement becomes a survival strategy rather than a choice. Moving beyond forced belonging, therefore, requires governance frameworks that transform displacement into structured, voluntary, and dignified mobility grounded in rights, inclusion, and shared responsibility.

A critical foundation for this transformation lies in Agenda 2063, particularly Aspiration 2, which envisions an integrated continent that is politically united and rooted in the ideals of Pan Africanism and Africa's Renaissance. This vision recognizes that continental unity cannot be achieved solely through economic integration or political cooperation among states. The movement of people is central to the realization of a shared African identity and a functional regional economy. When mobility is fragmented and securitized, it undermines the very principles of integration that Agenda 2063 seeks to promote (African Union, 2015, pp. 24–27). Migration governance must therefore be treated as a core pillar of African unity rather than as a peripheral or technical policy domain.

This Nkrumah-inspired push for unity is not only an internal African project; it also bears directly on how the continent engages the rest of the world. With the African Union now a member of the G20, Africa has an unprecedented opportunity to speak with one voice rather than as fifty-five separate and unequally positioned negotiating parties, a fragmentation that former colonial powers, and more recently other major economies, have long been able to exploit through divide-and-rule bargaining. A coherent, continent-wide migration regime would be one visible expression of a broader shift toward greater regulatory uniformity and simplification across African states. Such uniformity would make it easier for outside investors and trading partners to engage with Africa as a single, predictable market rather than negotiating dozens of bespoke regimes, and it would strengthen Africa's collective bargaining position in trade and investment negotiations, including efforts to secure fairer prices for natural-resource exports that have often been sold well below their true value. A unified approach to mobility, in other words, is not only about who may cross African borders; it is also part of the wider project of consolidating African agency in the global economy.

The African Union Migration Policy Framework for Africa and Plan of Action for the period 2018–30 provides a comprehensive roadmap for managing migration through a rights-based and development-oriented approach. The framework emphasizes regular migration pathways, labor mobility, protection for migrants and displaced persons, and cooperation among states (African Union, 2018, pp. 11–15). It reflects an understanding that migration can contribute to development when it is well governed. However, implementation across member states has remained uneven. Limited institutional capacity, political hesitation, and the dominance of security driven approaches have constrained progress. In many cases, national policies remain misaligned with continental commitments, creating gaps between normative frameworks and lived realities.

The African Union Protocol on the Free Movement of Persons (AU-FMP) represents a concrete mechanism for operationalizing this vision. By enabling Africans to travel, reside, and work across borders, the protocol seeks to normalize mobility and reduce irregular migration by expanding legal pathways (African Union, 2022, pp. 6–9). It also aims to support labor market integration and regional economic development. Concerns regarding labor competition, security risks, and absorptive capacity are legitimate, particularly given disparities in economic development and state capacity across the continent. Nevertheless, prolonged reliance on restrictive migration regimes has often deepened informality, exploitation, and vulnerability, undermining both state authority and migrant protection. A phased and coordinated approach to implementation, supported by regional institutions and responsibility-sharing mechanisms, offers a more sustainable alternative to blanket restriction.

Making structured, rights-based, and cooperative governance concrete requires confronting the scale of economic divergence across the continent. Roughly sixteen African states have a gross national income per capita below \$1,000, with Burundi as low as \$260, while comparatively wealthy states such as South Africa, Botswana, and Libya exceed \$6,000. This gap is far wider than in other regions that have liberalized movement: within the European Union, the largest divergence, between the Nordic countries and Bulgaria, is only around four to one. Applying a single, immediate, EU-style regime of unrestricted movement across such disparate economies risks channeling large and rapid population flows toward a handful of wealthier states, straining the absorptive capacity of the small and often vulnerable communities that would host them. A structured approach must therefore be graduated rather than uniform: liberalizing movement first and most fully among states with comparable income levels and labor-market conditions, such as within individual Regional Economic Communities, while phasing in wider continental mobility over time and pairing it with burden-sharing funds, infrastructure support, and transitional safeguards for receiving communities that face disproportionate pressure. Equally, easier mobility can impose costs on countries of origin, since those who leave are often young adults with above-average education and financial resources, raising the risk of brain drain in states that can least afford to lose scarce skilled labor. A rights-based framework should offset this through mechanisms such as circular and temporary labor migration schemes, diaspora and skills-transfer partnerships, and remittance- or destination-country-financed investment in the health, education, and training systems of sending states. Cooperative governance, in this sense, means calibrating the pace and design of liberalization to underlying economic realities, not simply removing restrictions uniformly across a continent whose members remain profoundly unequal.

Africa's migration governance agenda also aligns closely with global development commitments, notably Sustainable Development Goal Target 10.7, which calls for orderly, safe, regular, and responsible migration, and Sustainable Development Goal 16, which emphasizes peace, justice, and strong institutions. These goals underscore the need to balance mobility with protection and state interests with human security (United Nations, 2015, pp. 18–20). Exclusionary migration policies weaken institutional legitimacy by pushing mobility into informal and unregulated spaces, while inclusive frameworks enhance development outcomes, social cohesion, and trust between states and populations.

Human rights instruments further reinforce this pathway. The 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa reflects the continent's recognition of mass displacement as a structural reality rather than an exception. By expanding the definition of refugees beyond narrow persecution-based criteria, the convention affirms collective responsibility and solidarity (African Union, 1969, pp. 2–4). Similarly, the 2009 Kampala Convention on Internally Displaced Persons establishes clear obligations for states to prevent displacement, protect displaced populations, and support durable solutions (African Union, 2009, pp. 5–7). Despite their progressive scope, implementation remains inconsistent, particularly in conflict-affected and resource-constrained contexts. Strengthening compliance with these instruments is therefore essential to reducing forced migration and mitigating its associated vulnerabilities.

Moving toward an Africa without forced belonging also requires addressing the root causes of displacement. Protection mechanisms and legal frameworks are insufficient if conflict, political exclusion, climate stress, and uneven development persist. Investments in peacebuilding, inclusive governance, climate adaptation, and equitable economic growth are

critical complements to migration policy reform. Regional cooperation can further support responsibility sharing by easing pressure on frontline states and reducing the likelihood that displacement flows will become destabilizing. Addressing forced migration in isolation from broader development and governance challenges risks treating symptoms rather than causes.

Ultimately, transforming forced belonging into voluntary and dignified mobility requires sustained political will, institutional reform, and regional solidarity. Migration will remain a defining feature of Africa's future. The central question is whether it will continue to be governed through exclusion and securitization or reimagined as a foundation for unity, resilience, and shared development.

5.2. Conclusion

Forced migration in Africa is not an anomaly but a structural outcome of the continent's historical, political, and economic trajectories. From colonial border making to contemporary conflicts, climate stress, and uneven development, displacement has remained a recurring feature of African societies. The challenge facing the continent is therefore not whether migration will occur, but how it is governed and whose interests it serves. When mobility is managed through exclusion, securitization, and fragmented policies, it deepens vulnerability and reinforces conditions of forced belonging.

This study has demonstrated that forced migration reshapes Africa's borders not only geographically, but also socially, economically, and politically. Displacement alters demographic patterns, reconfigures labor markets, and transforms notions of citizenship and identity. While migration can generate economic dynamism, entrepreneurship, and cultural exchange, it can also intensify competition over resources, strain public services, and fuel insecurity when governance frameworks are weak. These outcomes are not inherent to migration itself but are produced through institutional and policy environments that shape how mobility is experienced.

Current approaches to migration governance in Africa remain marked by contradiction. Continental integration initiatives promote the free movement of goods and capital, yet the movement of people continues to be constrained by restrictive border regimes and security driven responses. This imbalance undermines regional cooperation and fails to address the structural drivers of displacement. An overreliance on border control and containment often exacerbates human insecurity while doing little to prevent irregular movement.

A sustainable response requires a shift from reactive and exclusionary models towards structured, rights-based, and cooperative migration governance. Aligning national and regional policies with continental frameworks such as Agenda 2063, the African Union Migration Policy Framework, and the Free Movement of Persons Protocol offers a pathway to transforming displacement into dignified and voluntary mobility. Equally important is addressing the drivers of forced migration through conflict prevention, inclusive development, and climate resilience.

In conclusion, Africa's future unity and stability will be shaped in part by how it governs mobility. Migration can either reinforce fragmentation or contribute to integration, depending on the choices made by states and regional institutions. Moving beyond forced belonging toward secure and voluntary mobility is not only a humanitarian imperative but also a political and developmental necessity for the continent. "My humanity is bound up in yours, for we can only be human together." This assertion by Archbishop Desmond Tutu captures the ethical foundation upon which a just, integrated, and people-centred African migration order must ultimately rest.

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