

Transnational illegal financial networks and cross-border criminal groups in the Horn of Africa

Berihu Teweldebirhan Gebresilassie

berihulay@gmail.com

Mekelle University

Research Article

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Abstract

Networks in the Horn of Africa involved in transnational illicit finance are marked by crime, weak governance, and porous borders. 'Beyond Boundaries' examines groups in Ethiopia, Somalia, Eritrea, Djibouti, and Sudan from 2010 to 2024 that threaten stability through money laundering, informal transfers, and smuggling, and that operate within fragile institutions. These groups exploit informal systems, diaspora connections, and regulatory gaps, with Eritrea's militarized economy, Somalia's clan networks, and Sudan's illicit trade routes. External factors, such as sanctions, influence these networks but do not weaken their resilience, which depends on diaspora remittances and hawala, both of which are affected by local politics. Highly transnational, they adapt to geopolitical shifts and are not constrained by borders—their survival depends on permeability and flexibility. Recommendations include strengthening cooperation among financial intelligence agencies, security forces, and border authorities to combat cross-border crime.

INTRODUCTION

Illicit financial flows (IFFs) encompass illegal activities such as tax evasion and money laundering, as well as illegal cross-border movements, corruption, and trafficking, all of which hinder development (Muluvi & Nandelenga, 2025). In Africa, capital flight stems from factors beyond poor investment decisions (Mekongo et al., 2023). Since the 1980s, Africa's shift toward capital liberalization has increased capital outflows and financial instability (Leykun, 2022). Despite differences in tax laws, strategies, loopholes, and incentives for foreign direct investment (FDI), IFFs continue to grow, weakening governance, revenue, and accountability (Olabisi-Ayodele, 2025). Tracking stolen assets remains difficult because of the complexity of global systems (Ogunbiyi-Badaru et al., 2024).

The Horn of Africa, including Djibouti, Eritrea, Ethiopia, Somalia, and Sudan, has become a hotspot for transnational crime due to instability, open borders, and socioeconomic challenges (Hub, 2023). Criminals exploit international trade to engage in human trafficking, migrant smuggling, and financial crimes (Aidoo et al., 2025). Law enforcement faces challenges such as corruption and weak governance, which also hinder regional cooperation during conflicts (FOLORUNSHO & SAMUEL, 2025). Criminal groups adapt by using informal trade routes and exploiting unrest, thereby building a criminal infrastructure that undermines governance and development (Lambrechts, 2024).

Horn's Criminal Race: Beyond Borders examines illicit finance in the Horn of Africa, highlighting instability, conflict, illicit funds, external influences, and complex networks. It covers money laundering, key actors, and geopolitical impacts, warning of security, economic, and cooperation challenges. The study promotes regional cooperation and stronger legal institutions in Djibouti, Ethiopia, Eritrea, Sudan, and Somalia. It recommends oversight, regional task forces, international monitoring, conflict-sensitive development, and preventive diplomacy. The report urges coordinated, risk-based efforts to improve security, development, and collaboration.

THEORETICAL AND EMPIRICAL LITERATURE REVIEW

Illicit financial flows (IFFs) involve illegal activities such as tax evasion and money laundering, yet research on them remains limited despite widespread concern (Ayalew, 2026). The term also includes aggressive tax planning and legal measures. Combining illicit activities with legal actions can obscure the true issues (Vitvitskyi et al., 2022). According to Global Financial Integrity (GFI), IFFs encompass illegal cross-border flows, corruption, and trafficking, all of which affect development (Muluvi & Nandelenga, 2025). There is an ongoing debate about whether legal tax avoidance should be classified as an IFF, as definitions vary (Pistone et al., 2024). Factors such as weak regulation, poor governance, commodity dependence, and open trade contribute to the growth of IFFs (Sisouphanthong et al., 2024).

Although countries claim compliance with international standards, such agreements can hinder cooperation and efforts to combat money laundering (Ohinok & Kopylchak, 2024). Global collaboration on offshore activities is essential but often hindered by mechanisms such as the automatic exchange of tax information (Patsula, 2024). Experts warn that IFFs lead to human rights violations, legal breaches, and illicit wealth (Netshisaulu et al., 2024). Despite reforms, inequality persists, with the top 1% owning most assets (Chancel et al., 2022). Corruption-driven IFFs drain resources in developing countries, weakening public services and investment (Muluvi & Nandelenga, 2025). These flows impair investment, slow economic growth, and are linked to organized crime, corruption, and tax evasion, threatening stability (Rao, 2025). The World Bank defines IFFs as illegal actions that weaken institutions and divert funds from sustainable development (Kelkar, 2024). Accurate measurement requires flexible methods to address illegal tax schemes, illicit markets, corruption, and terrorist financing (Brandt, 2023). Major challenges include distinguishing legal from illegal activities, combating illegal trade, and exposing corruption (Olmos Giupponi & Yu, 2022). Proper classification is essential for preventing double-counting and detecting illegal income, using standards such as the System of National Accounts (SNA) and the International Classification of Crime for Statistical Purposes (ICCS) (Fernandes, 2024).

Illicit financial flows (IFFs) stem from cross-border tax avoidance, corruption, and criminal enterprises. Globally, tax avoidance costs the economy between \$500 billion and \$650 billion annually, with developing nations losing 6–13% of their revenue (Ruzgas et al., 2025). In 2015, Africa lost \$67 billion to tax evasion, while corruption costs approximately \$148 billion annually (Mantzaris & Saruchera, 2024). Illicit trade, including drug trafficking and illegal wildlife trade, generates between \$1.1 trillion and \$1.6 trillion, with human trafficking adding \$5 to \$7 billion (van Uhm et al., 2021). Counterfeit goods and illegal waste trafficking pose threats to society and the environment (European Union Intellectual Property Office, 2022). Furthermore, the theft of cultural property, linked to historical injustices in Africa, affects social identity and societal development (Palmer, 2024). Although countries strive to recover stolen assets, IFF networks exacerbate inequality and undermine governance (Baruah, 2025).

Illicit Financial Flows (IFFs) threaten social and environmental well-being by diverting resources from the Sustainable Development Goals (SDGs), distorting GDP, increasing debt, and obstructing investment through capital flight. This draws criticism of developed nations (Chirowamhangu, 2023). In Africa, IFFs hinder development by widening investment gaps, restricting private-sector growth, and facilitating tax evasion, corruption, terrorism, and organized crime (Nkosi et al., 2023). These flows undermine poverty reduction, destabilize institutions, and enable elites to divert public revenues (Jiang et al., 2025).

Developing countries lose billions of dollars each year, underscoring the need for stronger tax systems (Ahmed, 2023). Poverty in sub-Saharan Africa largely stems from structural challenges and dependence on extractive industries (Idemudia et al., 2022). While GDP per capita may increase, employment and agricultural productivity can decline as growth shifts to the service sector, and the workforce's movement away from agriculture remains a challenge (Mizik et al., 2025).

Some capital flight stems from factors beyond poor investment, with IFFs from developing nations surpassing official aid (Amutabi, 2023). This examines IFFs in the Horn of Africa and their impact on the 2030 SDGs, linking economic growth and social progress (Tsakok, 2025). Reducing IFFs can help alleviate poverty, promote sustainability, attract investment, and strengthen global partnerships (Baruah, 2025). Women and children face disproportionate resource shortages, underscoring the importance of gender equality in sustainable development (Akinwale, 2023). Illicit activities such as logging, fishing, and mining cause \$7–12 billion in annual losses, damaging ecosystems and exacerbating poverty (FATF, 2021). IFFs also hinder climate finance efforts under the Paris Agreement, which aims to raise \$100 billion annually but has yet to meet this goal (Bhattacharya et al., 2023). They are linked to climate negotiations, conflicts, illegal trade, and security issues, although data gaps limit understanding (Belianska et al., 2022). Rising conflicts highlight the need for peace and development; about \$31.5 billion in IFFs is linked to conflicts, indicating that resource exploitation fuels violence (Hub, 2023).

Many African nations have low levels of human development, which are worsened by IFFs such as hawala, remittances, trade misinvoicing, and state capture, especially in the Horn of Africa. These IFFs are linked to corruption and organized crime (Alu et al., 2024). IFFs arising from trade misinvoicing, conflict, and diaspora remittances are often underestimated due to data gaps. Challenges such as data shortages and the difficulty of distinguishing capital flight from IFFs hinder progress (Muluvi & Nandelenga, 2025).

Research on transnational illicit finance in the Horn of Africa should combine macro estimates, fieldwork, and diaspora interviews to fill data gaps and reduce biases (Mohamud, 2023). It should draw on theories such as the Criminal Network, Social and Economic models, the Political Economy of Illicit Trade, and Transnational Crime. Analyzing illicit activities, collaboration, prevention, case studies, and impacts helps identify key networks that affect economies and governance (Cross, 2023). Challenges such as data shortages, sensitivities, and access issues require the triangulation of macro data, fieldwork, and diaspora perspectives (Roblain et al., 2025). Similar to ethnographies of hawala in Somali contexts and IFF analyses in Sudan, this approach supports the selection of variables for frameworks on informal transfers, illicit trade, trade misinvoicing, and regulatory capacity in Ethiopia, Somalia, Eritrea, and Sudan (Hando, 2023). The study highlights community resilience and informal governance, noting that enforcement alone is not enough (Kapoor, 2024).

METHODOLOGY

This methodology employs mixed methods to analyze transnational illicit finance networks in the Horn of Africa, including Djibouti, Ethiopia, Somalia, Eritrea, and Sudan, from 2010 to 2024. It examines development factors, operational strategies, and links to informal finance, government, and regulators.

The research combines macro trade data, transaction proxies, qualitative insights, and social network analysis. A CSV matrix of illicit flow estimates from UN COMTRADE, the IMF, and the World Bank includes fields such as country, year, estimate, confidence, quality, methods, and notes. Data collection relies on stakeholder interviews, macroeconomic data, regulations, and a literature review. It employs a comparative case study approach, providing cross-national insights through qualitative and quantitative methods. Ethical considerations include informed consent and data protection, while challenges include data gaps and access issues. This approach improves understanding of illicit flows and their socioeconomic effects.

RESULTS AND DISCUSSIONS

The Horn of Africa (HoA), including Djibouti, Eritrea, Ethiopia, Somalia, and Sudan, is a hub for transnational crime, including human trafficking, drug and arms smuggling, and wildlife poaching. Criminal groups exploit weak governance and open borders, often combining human trafficking with migrant smuggling. Corruption and fragile systems enable financial misconduct, while limited law enforcement hampers efforts to combat these crimes. These networks target refugees, rely on informal finance, and threaten regional stability. Although data is incomplete, seizures of guns and suspicious transactions highlight the problem. These issues are exacerbated by open borders, conflict-driven economies, and lenient regulations, especially regarding arms trafficking through Sudan, which influences regional dynamics.

Table 1
Key Market Indicators and Data Availability

Market	Primary quantitative proxies	Common data sources	Data coverage in the Horn of Africa	Reliability caveats
Arms trafficking	Seizure counts, weapon types, routes, price movements	UNODC, national police reports, customs, and conflict surveys	Moderate for Sudan/Somalia; low for Eritrea/Djibouti	Seizures ≠ market size; enforcement bias
Money laundering	STR counts, asset freezes, cross-border cash seizures	FIUs, central banks, AML evaluators	Low publicly; varies by country	STR quality varies; IVTS underreported
IVTS/hawala	Remittance estimates, corridor pricing spreads, and cash seizure patterns	Central banks, remittance studies, humanitarian transfers	Low; often qualitative	Informal flows invisible to official stats
Contraband smuggling	Seizure volumes (fuel, sugar, khat, tobacco), price differentials	Customs, border forces, market surveys	Patchy; Somalia/Ethiopia have more khat/fuel data	Localized and seasonal volatility

Source: Completion Author,2026

Table 1 shows that regional illegal networks in the Horn of Africa are often underreported because actors evade detection and enforcement is inconsistent. As a result, seizure data tend to reflect enforcement efforts more than actual market volume. Key indicators include arms seizures, price fluctuations, and suspicious financial activity. Weak border controls and lax regulations support these markets. Arms mainly flow through Sudan, especially during periods of unrest. Money laundering combines trade methods with informal systems and relies heavily on diaspora remittances. Proxy measures such as STRs and real estate inflows are used, but informal channels complicate estimation. Smuggling of key commodities across borders, including in Djibouti, Somalia, and Ethiopia, continues. Tracking seizures and market changes aids monitoring; however, reliable data remain limited.

Table 2
Comparison of Indicators Among Countries

Country	Arms (proxy)	Money laundering / IVTS (proxy)	Contraband (proxy)	Data confidence
Djibouti	Port seizure counts; transshipment reports	Trade-based anomalies; free-zone flows	Maritime transshipment of consumer goods	Low–Moderate
Eritrea	Sparse seizure reporting; border route indicators	Very low STR transparency; informal flows	Fuel/staple arbitrage across borders	Low
Ethiopia	Conflict-adjacent seizure spikes; retail price signals	STRs rising with formal banking; trade anomalies	Khat, fuel, staple smuggling corridors	Moderate
Somalia	Coastal inflows from Yemen; Bosaso hub indicators	Hawala volume proxies; remittance dependency	High-frequency khat and consumer goods flows	Low–Moderate
Sudan	Higher visible seizure reporting; continental node	Cash-intensive conflict economy; commodity laundering	Fuel, gold, staple smuggling across borders	Moderate

Source: Completion Author,2026

Table 2 compares proxy indicators of illicit networks in the Horn of Africa, including arms seizures, contraband price spreads, STRs, remittance gaps, and retail weapon prices across Sudan, Ethiopia, Eritrea, Djibouti, and Somalia. Data availability and accuracy vary: Sudan's data are available but affected by enforcement and subsidies; Ethiopia's large informal economy affects data availability; Eritrea's data come from market surveys; Djibouti's data reflect port activity; and Somalia's low bank penetration makes remittance data difficult to track. A multi-indicator dashboard covering seizures, price spreads, STRs, remittance gaps, and interdictions is recommended for monitoring, with normalization and bias adjustment. Because direct figures are rare, triangulating proxy data is essential for mapping illicit activities. The report summarizes indicators, methods, and data reliability.

No dataset on illicit financial flows (IFFs) for Ethiopia, Somalia, Eritrea, Djibouti, and Sudan covers 2010 to 2024, as no single source provides annual data. Ethiopia offers the most reliable estimate, with annual outflows ranging from US\$1.26 billion to US\$3.15 billion from 2005 to 2014. The other countries lack consistent data due to ongoing conflicts and weaker statistical systems. The dataset reports average IFFs over three multi-year periods. However, data for Somalia, Eritrea, Djibouti, and Sudan remain limited—the absence of yearly data results from limited publicly available information and reliance on informal channels. Researchers are advised to reconstruct estimates using trade misinvoicing and balance-of-payments analysis, while accounting for data uncertainties.

Table 3

shows a concise data matrix of illicit financial flows (IFFs) covering 2010–2024, divided into three multi-year periods.

Country	2010–2014 avg annual IFFs (USD)	2015–2019 avg annual IFFs (USD)	2020–2024 avg annual IFFs (USD)	Data quality & source
Ethiopia	US\$1.26–3.15 billion (annual range; 2005–2014 baseline)	No consistent public annual series; likely comparable or higher post-2015	No consistent public annual series; pandemic & instability likely raised volatility	Estimate from GFI/U4 synthesis; baseline range reported for 2005–2014. Use with caution.
Somalia	No reliable annual series is publicly available	No reliable annual series is publicly available	No reliable annual series is publicly available	Conflict and weak statistical systems: UNCTAD and regional analyses indicate high vulnerability to IFFs, but neither publishes annual country-level series.
Eritrea	No reliable annual series is publicly available	No reliable annual series is publicly available	No reliable annual series is publicly available	Minimal public data; regional reports flag risks (e.g., trade misinvoicing, remittance channels) but do not provide annual country-level series.
Djibouti	No reliable annual series is publicly available	No reliable annual series is publicly available	No reliable annual series is publicly available	Small economy with transit trade; IFF estimates are sparse and not published as a yearly country series.
Sudan	No consistent public annual series; some studies indicate substantial capital flight historically	No consistent annual public series; post-2011 fragmentation complicates estimates.	No consistent public annual series; conflict since 2023 increases uncertainty	Regional/continental reports characterize Sudan as a high-risk country for IFFs but lack a continuous annual matrix for 2010–2024.

Source: Completion Author,2026

Table 3 presents a project to reconstruct the IFF matrix for Ethiopia, Somalia, Eritrea, Djibouti, and Sudan from 2010 to 2024. It combines COMTRADE mirror-trade data with IMF BOP residuals. The primary output is a CSV file with columns including Country, Year, IFF_estimate_USD, Lower95_USD, Upper95_USD, QualityFlag, PrimaryMethod, and Notes. A methodology report will also be provided, detailing data sources, preprocessing steps, modeling techniques, and diagnostic methods.

Table 4
Overview of Informal Value Transfer Systems (IVTS) / Hawala Data

Country	Published annual series (2010–2024)	Typical IVTS channels	Practical status for reconstruction
Somalia	No continuous annual public USD series; extensive qualitative and case studies on the prevalence of hawala.	Hawala networks, remittance couriers, and diaspora cash couriers.	High priority for proxy reconstruction (remittance inflows, partner reporting, NGO surveys).
Ethiopia	No public annual hawala totals are available; the central bank and banks are increasingly formalizing remittances.	Formal banks + informal hawala agents; cross-border cash couriers.	Moderate — better BOP and banking data allow stronger calibration.
Eritrea	No public annual series; limited documentation.	Informal remittance corridors; suspected trade misinvoicing.	Low — sparse official data; high uncertainty.
Djibouti	No public annual series; transit economy with informal flows.	Transit trade, informal cash transfers.	Low–Moderate — small economy, but some partner trade records exist.
Sudan	No continuous public series; conflict and fragmentation complicate estimates.	Cross-border cash, informal banking, trade misinvoicing.	Low — significant data gaps and structural breaks (2011, 2019, 2023).

Source: Completion Author,2026

Table 4 highlights the lack of reliable annual IVTS (hawala) data for Ethiopia, Somalia, Eritrea, Djibouti, and Sudan from 2010 to 2024. It shows heavy reliance on hawala, especially in Somalia, even as Ethiopia works to formalize its financial system. A matrix prioritizes Somalia for rebuilding efforts, supported by qualitative research; Eritrea and Sudan have significant data gaps. The methodology uses primary data, proxies such as remittances and trade misinvoicing, and a Monte Carlo model to estimate IVTS with confidence intervals. Concerns about data accuracy are also noted.

Table 5
Comparative analysis of quantitative proxies across countries.

Country	Best quantitative proxies	Typical data sources	Confidence
Djibouti	Port seizure counts; container inspections; price spreads for transshipped goods	Port/customs logs; UNODC port studies; market price monitoring	Low–Moderate
Eritrea	Cross-border fuel/staple price spreads; anecdotal seizure reports	Border market surveys; NGO field reports	Low
Ethiopia	Seizure time series near conflict zones; STRs; khat price/volume series	National police; FIU summaries; market surveys	Moderate
Somalia	Hawala remittance proxies; coastal arms inflow seizure counts; khat flows	Remittance studies; UNODC hawala analysis; local market data	Low–Moderate
Sudan	Weapon seizure counts; commodity (fuel, gold) export anomalies; cash seizure totals.	UN/INTERPOL reports; customs; conflict monitoring	Moderate

Source: Completion Author,2026

Table 5 presents indicators for assessing arms trafficking, money laundering, IVTS, and contraband smuggling, including seizure counts, STR filings, and remittance gaps. Each sector uses specific methods for data collection and normalization, accounting for enforcement activities and potential biases. Data limitations can affect market size estimates; combining multiple indicators improves reliability. A composite risk index that aggregates normalized indicators to signal illicit activity shows little bias; maps and time series are used to monitor trends and anomalies. Regular updates and reviews enhance accuracy. The document explains how to compute key indicators and emphasizes the importance of consistently tracking enforcement and economic data to reflect illicit activity accurately.

Monthly data from 2018 to 2022 (covering 60 months) cover monitored towns and corridors. Key indicators include seizure count (S), STR filings (R), banked population (B), remittance inflow (F), household receipts estimate (H), commodity price spread (P), retail weapon price (W), and interdictions (I). Data are organized by location-month records, with missing months filled as needed. Core statistics include STR per 100,000 banked, remittance gap (%), average price spread, and z-score normalization. A combined risk score, calculated from weighted z-sums, highlights hotspots based on specific criteria. The methodology involves trend analysis, change-point detection, and significance testing. Outputs include country summaries, monthly hotspot locations, key indicators, and data-quality metrics such as coverage and confidence scores. Examples provide results and guidance on seizure peaks and price fluctuations. Deliverables consist of CSV tables and reports.

Table 6
Country Comparisons

Country	Arms proxy	ML / IVTS proxy	Contraband proxy	Data confidence
Djibouti	Port seizure counts; container inspections	Trade-based anomalies; free-zone flows	Container transshipment tonnage; price spreads	Low–Moderate
Eritrea	Sparse seizure reports; cross-border incident counts	Very low STR transparency; informal flows	Fuel/staple price spreads at border markets	Low
Ethiopia	Seizure time series near conflict zones; retail weapon prices	STRs per 100k banked; customs mirror stats	Khat export volumes; fuel smuggling seizures	Moderate
Somalia	Coastal inflow seizures; Bosaso hub indicators	Hawala remittance gap; fee spreads	High-frequency khat flows; maritime micro-trade	Low–Moderate
Sudan	Higher reported seizure counts; route node indicators	Cash seizures; commodity (gold/fuel) anomalies	Fuel/gold export anomalies; cross-border seizures	Moderate

Source: Completion Author,2026

Table 6 presents indicators and sources used to track arms trafficking, money laundering, IVTS, and contraband. It includes arms seizure data, such as monthly counts by weapon type and UNODC retail prices. Money laundering is assessed using suspicious transaction reports (STRs) per 100,000 banked individuals, as well as trade misinvoicing data from financial intelligence units. IVTS analysis compares formal remittance inflows with household receipts reported by the World Bank and IMF. Contraband data covers seizure tonnage, border price gaps, and customs logs. The dashboard features metrics and visualizations from 2018–2022, including panels, line charts, and heatmaps for anomaly detection. Data quality varies: moderate for Ethiopia and Sudan, and low for Eritrea, Djibouti, and Somalia due to limited data and methodologies.

POLICY RESPONSE

Developing a regional AML/CFT strategy formalizes informal remittance channels, improves trade transparency, and aligns enforcement with local economies. It aims to combat transnational illicit networks and support legitimate activities, including remittances and cross-border trade. Key actions include formalizing value-transfer systems, fostering regional cooperation, engaging the diaspora, enforcing sanctions, and promoting community initiatives. A risk-based approach prioritizes formalizing remittances, enhancing trade transparency, and expanding economic opportunities. Countries should focus on Djibouti's RSP licensing and TBML checks, Eritrea's surveys, Ethiopia's hawala operators, Somalia's KYC, and Sudan's FIU capacity. Efforts include mapping IVTS actors, updating trade laws, and

aligning enforcement with market signals. Monitoring seizure data, suspicious reports, and price spreads helps identify risks. Safeguards ensure data accuracy, prevent bias, secure user access through tiered KYC, and implement risk-based strategies.

Table 7
Comparison of Core Measures

Policy measure	Short description	Primary actors	Expected impact	Implementation challenges
IVTS formalization	Register and supervise hawala with proportional AML rules	Central banks; FIUs; IVTS operators	Reduce misuse while preserving remittances	Trust deficit; operator compliance
Regional FIU platform	Cross-border intelligence sharing	FIUs; law enforcement; regional bodies	Faster disruption of transnational networks	Data sharing, legal harmonization
Trade transparency	Mirror-trade checks; customs audits	Customs; trade ministries; WB/UNCTAD	Detect trade misinvoicing; recover revenue	Data quality; corruption
Targeted sanctions	Evidence-based asset freezes	UN/EU; national authorities	Disrupt key actors and enablers	Political backlash; evasion
Community resilience	Livelihoods and governance programs	NGOs; donors; local govts		

Source: Completion Author,2026

Table 7 examines transnational illicit finance in the Horn of Africa, linking it to conflicts, governance failures, and international flows. Illegal activities such as money laundering and smuggling increase insecurity, support non-state actors, and threaten sovereignty. The report emphasizes regional instability, illicit income, and external pressures that affect security, the economy, and cooperation. It calls for improved financial governance, a regional task force, and global efforts to map informal finance networks. Policies focus on conflict-sensitive growth and preventive diplomacy, with continuous monitoring. It compares illicit activities and governance across Djibouti, Eritrea, Ethiopia, Somalia, and Sudan, identifying drivers such as smuggling and arms transfers and using proxies such as price spreads and seizure data. Governance issues include Eritrea’s control and Sudan’s conflicts. Recommendations center on transparency and oversight. Measurement relies on proxies, emphasizing data reliability, corroboration, and the integration of informal sectors. Panel z-scores facilitate comparisons and summarize trends.

Table 8
Policy Response Comparison Matrix

Policy Measure	Ethiopia	Somalia	Eritrea	Sudan
IVTS Formalization and Proportional Supervision	Register IVTS; pilot mobile money onboarding in urban corridors.	Formalize hawala hubs and provide compliance training for clan-linked operators.	Limited registration with confidentiality safeguards to avoid politicization.	Register IVTS linked to gold- and livestock-trade corridors.
Regional FIU and Intelligence Sharing	Join the Horn FIU platform; share customs red flags with neighbors.	Integrate Somali FIU nodes with diaspora remittance monitors.	Participate selectively in intelligence sharing in accordance with confidentiality protocols.	Prioritize cross-border FIU links focused on mineral and fuel flows.
Trade Transparency and Customs Risk Management	Deploy mirror-trade monitoring for imports/exports; target fuel and textiles.	Strengthen port customs in Mogadishu and conduct risk audits of high-value imports.	Tighten export documentation for minerals; third-party audit of shipments.	Implement customs valuation reforms for gold and agricultural exports.
Targeted Sanctions and Asset Disruption	Evidence-based sanctions on identified facilitators; asset-freeze protocols.	Target transnational facilitators while protecting remittance channels.	Use narrow sanctions against state-embedded actors with multilateral backing.	Coordinate sanctions with transitional authorities to avoid humanitarian harm.
Diaspora Engagement and Financial Inclusion	Incentivize formal remittances via mobile wallets and fee reductions.	Build trusted formal corridors through community agents and mobile money.	Offer secure, formal channels with diaspora-confidentiality guarantees.	Create formal remittance windows tied to livelihood programs in border regions.
Community Resilience and Alternative Livelihoods	Invest in rural livelihoods in borderlands to reduce incentives for smuggling.	Support coastal and pastoralist livelihoods to reduce reliance on illicit trade.	Fund small enterprises and remittance-linked investment schemes.	Prioritize reintegration programs for ex-combatants and border traders.
Capacity Building and Phased Implementation	Donor-backed AML/CFT technical assistance; phased legal reforms.	Focus on operator training, FIU staffing, and port modernization.	Emphasize discreet technical support and sanctions compliance training.	Combine customs modernization with anti-corruption reforms and oversight.

Source: Completion Author, 2026

Table 8 outlines methods for monitoring contraband, beginning with seizure counts as indicators of enforcement effectiveness. Monthly records should include counts by type, location, and tonnage, standardized for clarity. Higher seizure numbers suggest increased trafficking. Suspicious Transaction Reports (STR) per capita are used to assess financial crime and are adjusted for region. Estimates of remittance gaps, disparities, and liquidity stress highlight reliance on informal payments. Commodity price spreads indicate arbitrage opportunities and require market monitoring. Retail firearm prices reflect arms supply, and data normalization aids interpretation. The report stresses the importance of consistent data collection from various sources to provide reliable evidence of trafficking and money laundering.

The report outlines measures for IVTS to prevent misuse and support remittance flows in fragile areas through registration and technical assistance. It emphasizes sharing cross-border intelligence among regional FIUs while maintaining confidentiality to prevent politicization. Strategies such as trade checks and audits address misinvoicing and smuggling. Implementation will be phased, with a focus on risk assessment, platform development, sanctions, and asset recovery. It considers country-specific risks—Ethiopia's division, Somalia's conflicts, Eritrea's sanctions, and Sudan's political situation—and proposes tailored actions. Monitoring will include financial, operational, and social indicators.

LEGAL FRAMEWORK AND THE JUSTICE SYSTEM

Legal frameworks in the Horn of Africa vary. Djibouti and Ethiopia have AML/CFT assessments and FIU mandates, whereas Eritrea and Somalia face legal gaps. Sudan's situation is complicated by conflict and TBML risks. A regional strategy should strengthen TBML laws, adopt risk-based IVTS regulations, enhance FIUs and prosecutors, and establish transparent asset-recovery mechanisms. Challenges include fragmented risk assessments and weak asset-recovery efforts in Eritrea and Somalia. Recommendations include implementing electronic manifests, modernizing NRAs, instituting tiered IVTS registration, and providing targeted training for FIUs and prosecutors. Balancing community protection with the avoidance of overregulation is crucial for financial inclusion and oversight.

Legal strategies for TBML and IVTS vary worldwide, revealing gaps and areas needing improvement. Djibouti should strengthen oversight and e-manifest regulations; Eritrea requires more robust TBML laws; Ethiopia has made progress with its Asset Recovery Proclamation; Somalia struggles with enforcement due to federal fragmentation; and Sudan's instability hampers progress. Suggested reforms include electronic manifests, tiered IVTS registration, capacity building for FIUs, and transparent asset recovery. The table highlights country-specific legal measures, gaps, risk assessments, and recovery efforts. It links them to reforms such as registration, e-manifests, TBML rules, KYC-lite, FIU analysis, and confiscation. Use it for comparison and planning.

Table 9
TBML, IVTS, and FIU Analysis

Country	TBML provisions	IVTS / remittance rules	FIU & prosecutorial powers	Risk assessment / NRA	Asset recovery provisions
Djibouti	Customs manifest rules; scope to mandate e-manifests and unit-value screening.	RSP licensing exists, but supervision is limited	FIU established; needs resourcing and cross-border exchange	NRA referenced in MER; implementation gaps	Confiscation legal basis present; transparency limited
Eritrea	Limited TBML legal text; weak mirror-trade mechanisms	IVTS is informal mainly; no public licensing framework	FIU and prosecutorial capacity are weak	NRA capacity is low; MER notes significant gaps	The asset recovery framework is underdeveloped
Ethiopia	Customs unit-value checks promoted; growing TBML focus	Steps to register hawaladars; scope for KYC-lite	FIU strengthening; prosecutors gaining asset-recovery tools	Active NRA work and regional engagement	Asset Recovery Proclamation No. 1364/2025 strengthens civil/criminal recovery.
Somalia	Port/manifest controls are weak; TBML legal text is evolving	Hawala is dominant; limited formal licensing	Financial Reporting Center active; prosecutorial capacity constrained	NRA work ongoing; federal/regional fragmentation	The asset-recovery legal framework is weak; reforms are in progress
Sudan	High TBML risk (gold, subsidy arbitrage); laws exist, but enforcement is inconsistent	IVTS active; formalization constrained by banking instability	FIU and customs units are variably functional	NRAs exist, but conflict undermines implementation	Asset recovery hampered by opacity and instability

Source: Completion Author, 2026

Table 9 highlights Somalia's efforts to update its AML/CFT Law, which are hindered by federal-regional fragmentation and limited banking infrastructure. Sudan's political instability weakens AML laws, underscoring the need for e-manifests and customs screening to combat TBML. Djibouti's FIU has gaps; reforms should include port e-manifest requirements and automated anomaly detection. Eritrea needs market surveys and phased IVTS registration to manage TBML and oversee IVTS. Ethiopia's Asset Recovery Proclamation improves recovery tools and should be supported by customs TBML units. Cross-border reforms should focus on adopting electronic manifests, implementing tiered IVTS registration, building FIU capacity, and standardizing asset recovery procedures. Somalia should prioritize the AML/CFT Act and the FRC regulations, particularly Parts 4 and 6, which address the FIU's powers, STR

rules, and IVTS guidance. Ethiopia should review its Asset Recovery Proclamation No. 1364/2025 and AML law regarding STRs, obligated entities, and referral processes. Djibouti should examine the MENAFATF evaluation and the 2020 AML/CFT law for definitions, STR obligations, and customs reporting related to e-manifests. Eritrea needs to review Proclamation No. 175/2014 on AML/CFT, including criminalization and FIU provisions, then evaluate customs rules for TBML gaps. Sudan should analyze reports from the central bank and the FIU, along with sector analyses, to identify intersections among customs, gold mining, subsidy arbitrage, and AML law, with a focus on manifests, unit-value provisions, and asset recovery.

Ethiopia has AML/CFT laws and a functioning FIU, but implementation challenges, limited resources, and political interference hinder efforts to combat illicit finance. Reforms should focus on improving engagement with informal value transfer systems (IVTS), strengthening FIUs and prosecutors, and increasing transparency in asset recovery. Somalia's fragmented legal framework and clan-based IVTS impede enforcement; community-sensitive legal approaches, improved local investigations, and stronger customs are required. Eritrea's opaque system and sanctions complicate enforcement; solutions should avoid politicization and support asset tracing. Overall, these countries need to build FIU capacity, ensure compliance with IVTS, and promote cross-border cooperation.

Djibouti's strategic location and port infrastructure heighten the risk of trade-related money laundering, given limited legal and enforcement capacity. Key issues include misinvoicing and a lack of forensic expertise. In Sudan, illicit economies and political shifts obstruct reforms. Progress depends on targeted prosecutions, asset recovery, and anti-corruption efforts within AML/CFT frameworks. Challenges include political interference and resistance from extractive sectors. The Horn of Africa's legal systems are fragmented: Ethiopia is enhancing AML/CFT laws, while Somalia, Eritrea, and Sudan have weak or politicized legal systems with limited judicial independence. Immediate priorities include regional AML/CFT coordination, safeguarding remittance channels, and strengthening prosecutors and FIUs. Political and social barriers across diverse legal systems hinder enforcement.

Table 10
Comparative matrix – Legal framework and justice system

Dimension	Ethiopia	Somalia	Eritrea	Djibouti	Sudan
AML/CFT statutes	Established national AML/CFT proclamation; ongoing reforms and risk assessments	Fragmented legal coverage; many regions rely on ad hoc rules	Narrow, opaque legal instruments; the sanctions environment complicates reform	Basic AML rules in place; limited enforcement capacity	Patchwork laws; transitional reforms, but legacy gaps
FIU & enforcement	Active FIU with donor support; increasing operational activity	Weak or nascent FIU presence; heavy reliance on international partners	Limited FIU engagement; selective cooperation with external actors	Small FIU; constrained by resource limits	FIU exists but is politicized; enforcement is uneven
Judicial capacity & independence	Growing legal tools, but capacity and politicization constrain prosecutions.	Weak formal courts; hybrid formal/informal dispute resolution dominates	Centralized justice system with limited independence	Minor judiciary; procedural gaps and case backlogs	Courts affected by instability and state capture
Cross-border cooperation	Increasing regional engagement and participation in AML networks	Reliant on UN/NGO channels and diaspora networks for cross-border info	Selective, confidential cooperation; political sensitivities	Strategic partner for regional trade; cooperation limited by capacity	Improving ties with partners, but fragile and uneven
Key legal risk	Implementation gap; risk of politicized enforcement	Criminalizing IVTS risks disrupting essential remittances	Sanctions and state control hinder transparent enforcement	Risk of regulatory overreach pushing IVTS underground	State-embedded illicit economies resist legal reform

Source: Completion Author, 2026

Table 10 indicates that Ethiopia's AML/CFT framework is solid but hindered by implementation challenges and political influence. Somalia and Eritrea rely on informal systems and need community-based legal strategies to facilitate remittances. Djibouti's strategic location requires updated customs procedures and enhanced FIU capacity to combat trade-based money laundering. Sudan's transitional politics require reforms to address long-standing problems. Recommendations include aligning standards, training FIUs, sharing intelligence, ensuring due process, and engaging communities in IVTS to build trust, prevent overreach, and counter political resistance.

Table 11 reviews the legal and criminal justice systems in Ethiopia, Somalia, Eritrea, Djibouti, and Sudan with respect to transnational illicit finance. Ethiopia has a national AML/CFT framework but struggles with

political commitment and enforcement. Somalia and Eritrea need community-based legal strategies to support informal remittances. Djibouti must update its customs procedures and strengthen its FIU to combat trade-based money laundering. Sudan, still in transition, requires legal reforms and improvements in governance. Recommended actions include regional AML/CFT harmonization, increasing FIU capacity, adopting due process legal tools, and expanding community involvement in IVTS to build trust and reduce criminal risks.

Table 12
Summary and Supporting Evidence

Dimension	Ethiopia	Somalia	Eritrea	Sudan
AML/CFT statutes	National AML/CFT proclamation and recent reform initiatives	Fragmented, limited national legislation and uneven enforcement	Narrow legal transparency; sanctions environment complicates reform	Patchwork laws; recent transitional reforms, but legacy gaps
Financial Intelligence Unit (FIU) & enforcement	Active FIU efforts; donor-backed capacity building	Weak FIU presence; reliance on international partners	Limited FIU engagement; selective cooperation	FIU capacity uneven; political interference reported
Judicial capacity & independence	Growing legal instruments, but constrained by capacity and politicization	Weak courts in many regions; hybrid formal/informal dispute resolution	Highly centralized justice; limited independence	Courts affected by instability and state capture
Cross-border cooperation	Increasing engagement, risk assessments, and regional dialogue	Reliant on ad hoc, NGO/UN channels and diaspora networks	Selective, confidential cooperation only	Cooperation is improving with transitional authorities, but it is fragile
Key gap	Implementation and interagency coordination	Formalization of IVTS without harming remittances	Political barriers to transparent enforcement	State-embedded illicit economies resist reform

Source: Completion Author,2026

Table 12 indicates that Ethiopia has AML/CFT regulations and is updating its asset recovery and crime-fighting frameworks. However, poor implementation, limited resources, and political pressures hinder progress. Informal transfer methods and clan networks complicate enforcement and can trigger social backlash when remittance laws are absent. Key issues include weak enforcement, political interference, and gaps between laws and community practices. Recommendations include harmonizing regional standards, funding joint task forces, and using targeted legal tools while minimizing negative impacts on legitimate remittances. Addressing transnational crime requires international cooperation and the enforcement of laws against crimes such as genocide and cybercrime. Ethiopia's legal system needs

clearer definitions of universal jurisdiction and procedures; prosecuting international crimes remains difficult. Developed countries focus on rehabilitation, while developing nations pursue strict enforcement, highlighting the challenges of combating illicit finance in the Horn of Africa.

SPECIAL PROGRAMS, ENFORCEMENT, AND INSTITUTIONAL MECHANISMS

This framework aims to combat transnational illegal finance in the Horn of Africa by safeguarding legitimate remittances and livelihoods. It promotes regional cooperation, including IVTS, to disrupt money laundering. Programs are tailored to each country's capacity, including formalizing IVTS in Ethiopia, Somalia, Eritrea, Djibouti, and Sudan; enhancing FIU coordination; monitoring trade; enforcing asset laws; and supporting communities through economic alternatives and remittance security. Projects include the IVTS Proportional Compliance Program, customs modernization, and community resilience strategies. Enforcement relies on FIU networks, joint task forces, and customs centers. The 36-month plan emphasizes risk assessment and expansion, with KPIs for formalization, efficiency, and social impact. Safeguards are in place to mitigate risks such as displacement and politicization.

Table 13 highlights governance challenges in the Horn of Africa (HoA), including weak law enforcement, resource shortages, and political instability. Regional frameworks such as AU-HoAI and IGAD need stronger political support and capacity building. Porous borders enable cross-border crime, necessitating joint operations and intelligence sharing. A victim-centered approach is promoted through trauma-informed care and legal integration, but local enforcement requires ongoing training. International support is available, yet instability and shifting alliances pose long-term risks that require ongoing monitoring and resources.

CONCLUSION AND POLICY RECOMMENDATIONS

The Horn of Africa faces challenges from transnational illicit finance, which exploits weak governance, porous borders, and informal value-transfer systems in countries such as Ethiopia, Somalia, Eritrea, Djibouti, and Sudan. These flows impede economic growth by diverting investment and fueling organized crime, corruption, and tax evasion. They also affect Southern Africa's mining industry, especially diamond and platinum mining, and have significant effects on local communities. Although some regulations are in place, efforts remain inadequate due to limited data, especially on trade and misinvoicing. Improving the accuracy of data on transportation and trade costs is crucial.

Effective responses require multiscale strategies, including regional coordination, community resilience, and legal measures. The region faces challenges such as human trafficking and migrant smuggling that demand greater cooperation and funding. Policies recommend creating anti-money laundering platforms, formalizing informal systems, increasing trade transparency, and empowering local communities. A phased, country-specific plan with monitoring and risk management is recommended. Addressing these issues holistically is vital for stability. Managing external militarization in the Horn of Africa requires international cooperation on security, development, and transparency. Policies should monitor illicit remittance flows, promote global collaboration to reduce violence, and use centralized databases to analyze illicit networks and inform policy decisions. Combining law enforcement, governance,

socioeconomic development, and efforts to combat cross-border crime is essential. It is also important to balance enforcement with respect for human rights and to address structural weaknesses that criminals exploit. A comprehensive approach to dismantling illicit networks, enhancing human security, and promoting peace is crucial.

Declarations

Informed consent to participate:

All participants gave informed consent before and during data collection. The use of anonymized, publicly available datasets helps safeguard vulnerable groups. The study protocol received approval from the Institutional Review Board of Mekelle University College of Health Sciences (MU-IRB2624/2025).

Ethical Approval and Compliance:

The study was approved ethically. The research protocol, approved by the MU College of Health Sciences' Institutional Review Board, is provided as a supporting document (MU-IRB2624/2025).

This section on ethics approval and participation consent affirms that all procedures involving human subjects adhered to applicable institutional standards and the Declaration of Helsinki.

Data Availability Statement:

The datasets generated and/or analyzed during this study can be obtained from the corresponding author. All supporting datasets and materials for review by referees and editors are accessible in HTMS (Responses) - Google Sheets.

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Table 11 and 13

Table 11 and 13 are available in the Supplementary Files section.

Supplementary Files

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