Borders in Globalization Review
Volume 7, Issue 2 (Spring & Summer 2026): 132–138
https://doi.org/10.18357/big_r72202622294

POLICY REPORT

Addressing the Illegal Trade Involving Tourist Vehicles in Ethiopia: An Integrated Tracking and Enforcement Approach

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This report examines the challenges and strategies associated with controlling unlawful trade activities involving tourists utilizing their vehicles in Ethiopia. The policy objective is to prevent tourists from exploiting tax-free vehicle entry privileges for illicit trade, specifically through illegally selling their cars without fulfilling tax and duty obligations, which results in significant revenue loss for the Ethiopian government and undermines fair competition in the local automotive market. The government can effectively address this issue and safeguard its revenue by implementing an integrated tracking system that combines vehicle registration, passenger information, and data analytics. The system's continuous monitoring, evaluation, and refinement would ensure its long-term efficacy. This report proposes and outlines this solution.

Executive Summary

Ethiopia's tourism policy permits international tourists to import their vehicles tax-free for up to six months. While this policy has spurred tourism growth, it has inadvertently opened avenues for illegal trade. In many cases, tourists import vehicles, only to resell them domestically without paying the required taxes and duties, resulting in a considerable revenue loss for the government and undermining market fairness. Recent data indicate that between 2022 and 2023, at least 70 vehicles evaded proper customs clearance, causing losses estimated at US$2,049,724.

This report provides an in-depth analysis of the current challenges in regulating tourist vehicle imports, with a particular focus on illicit resale. The report also outlines an integrated tracking system that encompasses enhanced vehicle registration, GPS-based monitoring, and data analytics to detect and deter unauthorized activities. The report further underscores the importance of inter-agency collaboration, integrating efforts with Bole International Airport, the Ethiopian Immigration Authority, and the Transport Ministry to streamline enforcement and data sharing.

Key policy recommendations include the immediate rollout of the proposed tracking system, enhanced reporting protocols, and regular inter-agency audits. These measures are designed to not only recapture lost revenue but also to promote a transparent and secure environment for both tourists and local market stakeholders. The report concludes that adopting these recommendations would strengthen Ethiopia's regulatory framework and contribute significantly to sustainable economic growth.

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1. Introduction

Tourism has significantly contributed to the socio-economic development of many countries globally. As an economic activity, tourism is increasingly common in developing nations and may impact the livelihoods of the impoverished both directly and indirectly. Ethiopia, a less frequented African destination, has steadily increased tourist arrivals since the 1990s, except during the conflict with Eritrea (Yeshanew 2015). International tourist arrivals numbered 79,000 in 1990, rising to 136,000 in 2000, marking a 72% growth rate. Domestic and international visitor expenditure directly added US$462 million to the Ethiopian GDP, including indirect and induced effects (Ethiopia. Ministry of Culture and Tourism 2020, 1; Engda 2020, 6).

The Ethiopian travel and tourism sector accounted for 7% of the total GDP. The establishment of a robust regulatory framework would not only deter illegal activities but also cultivate a more transparent environment for legitimate tourism operations, which is essential for fostering sustainable economic growth in the region and mitigating the adverse effects associated with unregulated tourism practice. To foster tourism growth, the government has enacted policies permitting tourists to import their vehicles tax-free for six months (Ethiopia. Ministry of Revenues 2012, 4). This policy has significantly boosted tourism in the years following its announcement.

Nevertheless, the announcement has also unintentionally opened avenues for illicit trading activities. This paper examines the challenges and strategies for controlling illegal trade by tourists using their vehicles in Ethiopia. The main goal is to prevent the misuse of tax-free vehicle entry for illicit trade, particularly the unauthorized sale of vehicles without meeting tax and duty requirements. The study suggests adopting an integrated tracking system to improve oversight and compliance, utilizing data from the Ethiopian Customs Commission on missing vehicles and their owners who have departed the country.

The suggested system would entail a collaborative effort with Bole International Airport, the Ethiopian Immigration Authority, and the Ethiopian Transport Ministry to facilitate efficient surveillance of vehicle movements and owner activities nationwide. This collaborative approach would not only aid in curbing illegal activities but also enhance the overall efficacy of the tracking system by ensuring that all relevant stakeholders are informed and proactive in enforcing compliance measures.

1.1 Tourist Vehicle Policy in Ethiopia

The Ethiopian government has introduced a policy to boost tourism, permitting international tourists to import their vehicles tax-free for up to six months (Kidane-Miriam 2015, 12). According to Directive No. 116/2008 E.C, this measure aims to make Ethiopia a more appealing destination for tourists who wish to travel in their vehicles (Ethiopia. Ministry of Revenues 2012, 4).

Nonetheless, the policy's structure unintentionally allows for misuse, especially when cars are sold illegally without paying the required taxes.

1.2 Problem Statement

Illegal trade activities involving tourist vehicles pose significant challenges for Ethiopian customs authorities. Vehicles that enter the country tax-free but are subsequently sold or otherwise disposed of without proper tax payment undermine the integrity of Ethiopia's customs regulations and revenue collection efforts. A considerable number of tourists sell their vehicles within the country without complying with tax and duty regulations, resulting in substantial revenue loss for the Ethiopian government. Due to this illegal practice, over 70 vehicles vanished from the government enforcement system from 2022 to 2023 without paying the required tax and duty. This resulted in a government loss of about US$2,049,724 (see Table 1.1). This illegal activity also undermines fair competition in the local automotive market. The challenge is exacerbated when vehicle owners involved in such activities leave the country, hindering enforcement and recovery efforts.

The Ethiopian Customs Commission employs a traditional system to address this issue. Guided by the principle of preventing illegal practices through self-compliance, and related to risk management and self-assessment, the Commission aims to deter unlawful activities like commercial fraud (under-or over-invoicing, incorrect description, and classification of goods, etc.) and the smuggling of prohibited and restricted items, among other activities, by encouraging measures that foster self-compliance. These measures include providing information and advice to traders, issuing advance rulings on customs classification, customs valuation, preferential origin, conducting post-clearance audits, and offering simplified procedures for authorized traders (Ethiopia. Revenues and Customs Authority 2017, 30). Efforts are underway to inspect and locate vehicles across the country whose owners have not reported within the stipulated time. Despite the support of customs officers, the Commission's mission faces obstacles including manual errors and various constraints, such as inadequate technological advancement and corruption involving illicit traders and government officials. Ethiopia should look beyond traditional enforcement methods and consider a more comprehensive and technologically driven approach to address the illegal trade involving tourist vehicles more effectively.

2. Data Analysis and Findings

2.1 Data Source

This paper addresses the issue by utilizing data from the Ethiopian Customs Commission, concentrating on cases where vehicles have disappeared and their owners have left Ethiopia. This data sheds light on the magnitude of the problem and helps identify trends that could aid in devising effective control strategies. Table 1 (below) uses sample data from the "Four-Page Letter" issued by the Federal Democratic Republic of Ethiopia Customs Commission (2023) to estimate the potential revenue loss to the Ethiopian government. The methods for tax simulation sampling are detailed on Webb Fontaine (https://webbfontaine.com).

2.2 Analysis of Vehicle Data

The analysis identifies several critical trends:

- **Vanished vehicles:** Data from the Ethiopian Customs Commission indicates that from 2022 to 2023, 70 vehicles entered Ethiopia tax-free under the tourist vehicle policy and failed to exit within six months.
- **Owner profiles:** Most of the cases involve tourists who met initial entry requirements but failed to pay their tax duties.
- **Geographic patterns:** Higher frequencies of vehicle disappearances are noted in specific regions and at certain entry points, suggesting they may be hotspots for illicit activity.
- **Revenue implication:** The estimated revenue loss from the 70 unreported vehicles, calculated using average vehicle import tax and duty rates, amounts to US$2,049,724.

2.3 Implement an Integrated Tracking System

To effectively combat illegal trade activities, the implementation of an integrated system is proposed to track tourists' movements throughout their stay in Ethiopia. This system would utilize existing databases and technologies to monitor vehicle usage and ownership.

2.3.1 Vehicle Registration and Tracking

- Implement a comprehensive vehicle registration process upon entry, capturing detailed vehicle information and owner identification.
- Install GPS tracking devices on all tourist vehicles to monitor their locations and movements.
- Conduct regular vehicle inspections to confirm the condition and ownership of the vehicles.

2.3.2 Passenger Information Integration

- Employ passenger information systems to track tourists' movements based on their details. By integrating data from various government agencies, it is possible to oversee the entry, stay, and departure of tourists and their vehicles.
- Collaborate with Bole International Airport and other pertinent government agencies, such as the Ethiopian Immigration Authority and Ethiopian Transport Ministry, to access passenger information, including flight details, passport data, and visa information.
- Cross-reference vehicle and passenger data to uncover discrepancies and potential irregularities.

2.4 Data Analysis and Intelligence

- Develop sophisticated data analytics to detect patterns of suspicious vehicle activities, such as frequent ownership transfers.

Table 1.1: Sample Vehicles: Potential Tax to Be Paid.

	BRAND	MODEL	HORSEPOWER	TOTAL CARS	FREIGHT ON BOARD ($USD)	INDIVIDUAL TAX (ETB)	TOTAL TAX (ETB)
1	TOYOTA	COROLLA 2022	1798	41	25,863	4,851,597	198,915,504
2	HYUNDAI	KONA 2021	998	13	15,315	2,872,826	37,346,741
3	FORD-F150	PICK UP 2021	2700	2	32,683	6,130,760	12,261,520
4	MERCEDES	BENZ GLA 2021	1300	2	33,280	6,242,746	12,485,493
5	CHEVROLET	TRAIL BLAZ 2021	1200	3	20,181	3,785,603	11,356,809
6	MITSUBISHI	MONTERO 2021	2998	6	41,366	7,759,539	46,557,238
7	NISSAN	QUSHQAI 2018	1197	3	17,872	3,352,475	10,057,425
Cumulative Tax to Be Paid: **328,980,733.12 ETB (**US$2,049,724**)**							

- Use data-driven insights to shape enforcement strategies and allocate resources efficiently.

2.5 Inter-Agency Collaboration

- **Bole International Airport:** Set up a data-sharing protocol with Bole International Airport to monitor passenger movements on departure.

- **Ethiopian Immigration Authority:** Partner with the Immigration Authority to ensure the recording and monitoring of vehicle entries on tourist visas.

- **Ethiopian Transport Ministry:** Collaborate with the Transport Ministry to keep a current database of vehicles and their legal statuses, aiding in tracking movements and regulatory compliance.

2.6 Enhanced Reporting and Monitoring

- Establish a thorough reporting system mandating tourists declare any changes in their vehicles' status or location. This system should be integrated with border control and customs for immediate updates. The study determined that addressing the problem of illegal trade activities involving tourist vehicles in Ethiopia necessitates a comprehensive and varied strategy.

3. Proposed Integrated Tracking System

By implementing an integrated tracking system and fostering collaboration among key government agencies, Ethiopia can enhance its ability to monitor and control tourist vehicle activities. This would not only protect the country's revenue but also ensure that the tourism policy remains beneficial and sustainable.

GPS tracking technology has revolutionized how organizations manage their operations, assets, fleets, and workforce. By offering real-time location data and valuable insights, a GPS tracking system provides numerous advantages such as heightened efficiency, augmented productivity, bolstered safety, and significant cost reductions (Garner 2023).

This proposal examines the implementation of GPS systems to control visitor vehicles and prevent illegal trade within Ethiopia's territories. The focus is on how GPS technology can be integrated into vehicle management systems to enhance security and regulatory compliance. The outline demonstrates the potential of GPS technology to improve regulatory compliance and ensuring a safer environment for all visitors. Continued monitoring and adaptation of the system would help address any emerging challenges and maintain the effectiveness of the GPS tracking initiative. To address the pervasive issue of vehicle fraud and illegal trade activities, the study proposes the installation of a nationwide GPS tracking system in Ethiopia that could be leveraged to control and monitor the movement of tourist vehicles. This system would integrate data from various government agencies to provide a comprehensive view of vehicle activities and track any discrepancies or suspicious patterns.

3.1 GPS Tracking System Installation

All vehicles granted access to the country should be equipped with GPS tracking devices. The GPS devices would be linked to a central monitoring system, providing real-time data on vehicle locations. In addition, the system would include a feature for alerting authorities in cases of unauthorized movement or tampering, thereby amplifying efforts to combat vehicle-related illegal activities and ensuring safer transit for tourists within the country (Liu et al. 2006, 15).

This proactive approach would not only mitigate the risk of vehicle theft or illegal trade but also enhance overall traffic management and security within Ethiopia, as demonstrated by successful implementations of similar systems in various sectors across the globe (Arellano-Zubiate et al. 2021, 30; Liu et al. 2006, 15). Moreover, integrating advanced data analytics with these GPS tracking systems could significantly improve the detection of irregular patterns, allowing authorities to respond swiftly to potential illegal activities, while also ensuring safer transit experiences for tourists in Ethiopia (Liu et al. 2006, 10).

Figure 1. Real-time GPS tracking system diagram. Source: Snaptrax, https://snaptrax.com.au

3.2 Central Monitoring System

A dedicated control room would be set up with trained personnel to monitor vehicle movements. The system would integrate GPS data with CCTV footage and access control records. By ensuring that trained personnel analyze movements in real-time, the central monitoring system would be capable of promptly

Figure 2. Central monitoring room. Source: Snaptrax, http://snaptrax.com.com.au

identifying suspicious activities and facilitating immediate intervention when necessary, thereby further reinforcing the integrity of vehicle operations within the country (Liu et al. 2006, 12). This comprehensive framework, when effectively implemented, would not only deter illegal trade practices but also enhance the safety and security of tourists, fostering a more sustainable tourism environment in Ethiopia, as evidenced by successful applications of intelligent transport systems in other regions which highlight their potential to address similar challenges.

3.3 Access Control Integration

Vehicles would be required to register and receive authorization before crossing the border into Ethiopia. Authorized vehicles would be equipped with GPS devices during the registration process. This process would ensure that every vehicle has been vetted and approved for entry, facilitating a streamlined approach to monitoring and managing tourist vehicles, thus reducing opportunities for illegal activities and enhancing compliance with national regulations (Nayse, Atique, and Agrawal 2014, 518).

3.4 Integrate with Existing Systems

To maximize the benefits of GPS tracking, also consider investing in a solution that can integrate with Ethiopia Customs' existing systems. The integration would enable seamless data sharing and task automation, reduce manual effort, and improve efficiency (Garner 2023). This collaborative framework, combined with the utilization of innovative GPS and intelligent transport systems, has the potential to not only curb illegal activities but also streamline operations for tourist vehicles, ensuring a safer and more efficient travel experience for visitors to Ethiopia.

3.5 Data Analytics

Advanced analytics tools would analyze vehicle movement patterns to identify suspicious activities. Alerts would be generated for unusual behaviour, such as unauthorized removal of GPS devices from vehicles. Predictive analytics could anticipate potential violations and enable proactive interventions. The insights gained from successful implementations of similar GPS technology in various sectors underscore the need for Ethiopia to adopt a robust system that enhances compliance and promotes tourism safety through real-time oversight of vehicle movements (Liu et al. 2006,10; Bernat 2015, 20). The success of this GPS tracking initiative would depend on its seamless integration with existing government systems, such as those used by customs, immigration, and transportation authorities.

4. Conclusion

Tourism is a critical driver of economic growth in Ethiopia. The tax-free vehicle import policy, while successful in attracting international visitors, has inadvertently created a loophole for illicit trade activities. The current manual and fragmented enforcement system has proven insufficient in curbing the misuse of this policy, leading to significant revenue losses and unfair market practices.

The comprehensive analysis presented in this report demonstrates that an integrated tracking system anchored by GPS technology, data analytics, and

enhanced inter-agency collaboration offers a viable and effective solution. By automating vehicle registration, monitoring real-time movements, and fostering seamless data sharing among key agencies, Ethiopia can not only recapture lost revenue but also restore the integrity of its customs procedures.

In light of these findings, it is clear that modernization of the enforcement framework is not merely an option but a responsibility. Embracing technology-driven solutions would fortify the regulatory structure, enhance transparency, and pave the way for sustainable tourism growth.

5. Implications and Recommendations

5.1 Implications

If an integrated system is implemented:

- **Enhanced monitoring:** Authorities would be able to continuously monitor tourist vehicles, significantly reducing the risk of illegal resale.
- **Revenue protection:** Improved tracking would ensure that vehicles complete the necessary tax and duty procedures, thereby protecting public revenue.
- **Market fairness:** With proper enforcement, the local automotive market would experience fewer distortions caused by undercutting from illegal sales.

If the current system persists:

- **Continued revenue loss:** Without modernization, significant tax revenue will continue to be lost annually.
- **Increased fraud:** The loopholes in the current policy will remain, encouraging further exploitation.
- **Erosion of trust:** Persistent gaps in enforcement may undermine public and investor confidence in Ethiopia's regulatory framework.

5.2 Recommendations

5.2.1 Immediate Rollout of the Integrated Tracking System

- **Vehicle registration enhancement:** Implement a mandatory, centralized registration process for all vehicles entering under the tax-free policy. Ensure that each entry is logged in a unified database accessible to all relevant agencies.
- **Mandatory GPS installation:** Require all eligible vehicles to be fitted with GPS tracking devices at the point of entry. These devices should be tamper-proof and capable of providing real-time data.

5.2.2 Strengthen Inter-Agency Collaboration

- **Data sharing protocols:** Formalize data-sharing agreements with Bole International Airport, the Ethiopian Immigration Authority, and the Transport Ministry. This would ensure that passenger and vehicle information is cross-verified for accuracy.
- **Establish a joint enforcement task force:** Create an inter-agency task force dedicated to monitoring, investigating, and intervening in cases of suspected policy abuse. This team should have clear mandates, defined roles, and regular performance reviews.

5.2.3 Enhance Data Analytics and Monitoring

- **Deploy advanced analytics tools:** Invest in software platforms capable of processing and analyzing real-time data from GPS devices. This should include machine learning algorithms for anomaly detection and predictive analysis.
- **Regular reporting and auditing:** Institute a system of regular audits and generate periodic reports that detail vehicle movements, compliance levels, and identified anomalies. This transparency would help build trust and facilitate prompt corrective action.

5.2.4 Capacity Building and Training

- **Training programs for enforcement personnel:** Develop and implement training programs that familiarize customs and allied officers with the new technologies and data systems. Continuous professional development should be a core component of the new system.
- **Technology transfer and support:** Engage with technology providers to ensure that the deployed systems are supported, updated, and adapted to the local context. Long-term maintenance and periodic reviews will be crucial for sustained success.

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