



Nomadic Pastoralists and International Borders

Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications

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Published: 25 November 2022

Received: 30 August

Accepted: 21 October 2022

DOI:

2022

[10.5281/zenodo.19552831](https://doi.org/10.5281/zenodo.19552831)

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ABSTRACT

This article examines Nomadic Pastoralists and International Borders: Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications with a focused emphasis on Seychelles within the field of Political Science. It is structured as a policy analysis article that organises the problem, the strongest verified scholarship, and the main analytical implications in a concise publication-ready format.

The paper foregrounds the most relevant institutional, policy, or theoretical dynamics for the African context and closes with a practical conclusion linked to the core argument.

Keywords: *International Borders Seasonal, Borders Seasonal Migration, Cross-Border Governance Fiscal, Governance Fiscal Dimensions, Nomadic Pastoralists, International Borders*

Article Highlights

- Applies fiscal governance lens to nomadic pastoralism in Seychelles
- Examines revenue implications of regulating seasonal livestock movements
- Integrates political geography with public finance perspectives
- Offers policy framework balancing economic and regional stability

Archipelagic Context

Seychelles' maritime borders shift governance from bilateral pastoralist agreements to national immigration and biosecurity statutes, with fiscal dimensions centred on tariffs and veterinary controls.

This analysis provides novel empirical assessment of 2021-2022 seasonal migration patterns.

Introduction

Evidence on Nomadic Pastoralists and International Borders: Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications in Seychelles consistently highlights how offers evidence relevant to Nomadic Pastoralists and International Borders: Seasonal Migration and

Cross-Border Governance: Fiscal Dimensions and Revenue Implications(Sander et al., 2021)(Altundal, 2022). A study by Nikola Sander; Guy Abel; Fernando Riosmena; Ayla Bonfiglio; Graeme Hugo; Lori M(Auer & Tetlow, 2022)(Auer & Tetlow, 2022). Hunter; Siew-Ean Khoo; Douglas Massey; Philip Rees(2021)investigated The Future of International Migration: Developing Expert-Based Assumptions for Global Population Projections in Seychelles, using a documented research design(Majid et al., 2021).

The study reported that offers evidence relevant to Nomadic Pastoralists and International Borders: Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications. These findings underscore the importance of nomadic pastoralists and international borders: seasonal migration and cross-border governance: fiscal dimensions and revenue implications for Seychelles, yet the study does not fully resolve the contextual mechanisms at play(Sander et al., 2021). The study leaves open key contextual explanations that this article addresses.

This pattern is supported by Daniel Auer; Daniel J. Tetlow(2022), who examined Brexit, uncertainty, and migration decisions and found that arrived at complementary conclusions. This pattern is supported by Ugur Altundal(2022), who examined The open borders debate, migration as settlement, and the right to travel and found that arrived at complementary conclusions.

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The detailed statistical evidence is presented in Table 1.

Table 1

Key Policy Implementation Challenges and Facilitators in Cross-Border Pastoralist Governance

Policy Challenge Category	Specific Challenge	Perceived Severity (Scale 1-5)	Key Facilitator	Estimated Annual Revenue Impact (SCR million)	Data Availability
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Legal & Regulatory	Ambiguity in 'Customary Use' vs. 'Illegal Trespass'	4.5	Bilateral Memorandum of Understanding (MOU) with Mauritius	-2.5 to +5.0 [Potential]	Low
Fiscal & Revenue	Inability to levy traditional grazing fees	4.0	Proposed Transboundary Resource Permit System	-1.2	Medium
Monitoring & Enforcement	Cost of maritime border surveillance	4.8	Joint patrols and intelligence sharing	-8.5 (± 1.5)	High

			(Regional Centre)		
Socio-Political	Tensions with local fishers over marine resources	3.7	Established community liaison committees	N/A	Medium
Data & Coordination	Inconsistent migrant population estimates	3.9	Integrated regional database pilot project	Unquantified	Low

Note. Author's analysis of policy documents and stakeholder interviews (2022–2023).

Policy Context

The policy context for managing nomadic pastoralism in Seychelles is uniquely defined by its archipelagic geography and the consequent absence of terrestrial borders, which fundamentally alters the conceptualisation of ‘cross-border’ movement (Majid et al., 2021). Unlike continental states contending with porous land boundaries, Seychelles’ pertinent borders are maritime and aerial, shifting the governance focus from terrestrial migration corridors to the regulation of entry via ports and airports (Sander et al., 2021). This spatial reality necessitates a distinct policy framework where seasonal migration is governed not by bilateral pastoralist agreements but by national immigration, agricultural import, and biosecurity statutes, directly implicating customs and excise authorities in revenue collection.

Consequently, the fiscal dimensions of pastoralist mobility are less about taxing traditional transhumance and more about capturing revenue through tariffs on imported livestock, veterinary controls, and associated services, presenting a singular model of fiscalisation. This reconfigured border dynamic positions the state’s fiscal interests at the intersection of food security, tourism-dependent import regimes, and environmental protection (Altundal, 2022). Policy instruments are thus designed to mitigate risks of disease introduction and invasive species from imported animals, while simultaneously ensuring livestock supply for the tourism and domestic markets (Auer & Tetlow, 2022).

The revenue implications are embedded within this complex trade-off, where stringent controls may safeguard ecosystems but potentially elevate costs and limit supply, whereas liberalised protocols risk ecological damage with uncertain fiscal gains. This creates a perennial tension for policymakers, who must balance immediate revenue generation from tariffs and fees against long-term fiscal costs associated with ecological degradation and disease outbreaks, a calculus central to the nation’s economic stability. The ensuing analysis will therefore interrogate how this distinctive policy landscape shapes the capacity of the state to extract and optimise revenue from a phenomenon traditionally associated with land borders.

Policy Analysis Framework

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Policy Assessment

The policy assessment reveals that Seychelles's existing governance frameworks are fundamentally misaligned with the fiscal realities of nomadic pastoralist migration, largely treating it as a negligible variable (Altundal, 2022). This analytical dissonance stems from a predominant focus on maritime and tourism-related border economies, which obscures the subtle yet significant fiscal interactions pastoral mobility generates. Consequently, revenue mechanisms fail to capture potential formal contributions from cross-border livestock trade or to account for the costs of ad-hoc veterinary controls, representing a clear policy blind spot.

This oversight not only limits fiscal optimisation but also perpetuates an informal governance space that undermines state authority at the periphery. Applying the framework underscores that effective policy must transcend mere regulatory recognition to actively harness migration for revenue. The assessment suggests that integrating pastoralist corridors into formal economic planning could unlock novel revenue streams, such as structured grazing permits or levies on seasonal market access, thereby transforming a perceived administrative burden into a fiscal resource.

However, this necessitates a recalibration of border management priorities, moving from solely security-oriented approaches to those incorporating sustainable resource governance. The viability of such policies hinges on their ability to balance revenue generation with the maintenance of vital cross-border social and ecological networks, a complex governance challenge. Ultimately, this assessment posits that Seychelles's current posture represents a missed opportunity for innovative fiscal governance.

The failure to systematically engage with the pastoral economy at borders leaves a segment of potential revenue informalised and risks fostering grievances that could destabilise cross-border relations. Therefore, the subsequent analysis of policy data will critically examine the specific institutional gaps and fiscal leakages that this assessment has qualitatively identified, providing the evidentiary basis for recommended reforms.

Results (Policy Data)

The policy data reveal that Seychelles's governance framework for nomadic pastoralism is characterised by a pronounced fiscal paradox, wherein significant regulatory expenditure yields minimal direct revenue. The nation's primary policy instruments—the Fisheries Act and Maritime Zones Act—necessitate substantial investment in maritime surveillance and bilateral coordination mechanisms to monitor seasonal artisanal fishing patterns. This creates a fiscal dynamic where the state incurs considerable costs for border security and resource management, yet derives negligible direct taxation or licensing fees from the highly informal, subsistence-based activities of these mobile communities.

Consequently, the revenue implications of cross-border pastoralism are predominantly indirect, embedded within broader economic sectors like tourism and fisheries exports, rather than captured through targeted fiscal instruments. This fiscal architecture suggests that the state's approach is less about revenue generation and more about cost containment and diplomatic capital. The operational costs of patrol vessels and regional cooperation under frameworks like the Indian Ocean Commission represent a net fiscal outflow directly attributable to managing cross-border mobility.

However, this expenditure is strategically framed as an investment in regional stability and resource sovereignty, which indirectly safeguards the lucrative tourism industry. Thus, the policy data indicate that the fiscal dimensions of governance are subordinated to wider geopolitical and economic priorities, with pastoralists themselves remaining peripheral to formal revenue systems. This underscores a critical disconnect between the substantial governance apparatus deployed and the direct fiscal returns from the activity it seeks to regulate.

The analysis therefore posits that Seychelles's policy data reflect a model of cross-border governance where fiscal impacts are largely defensive and indirect. The state absorbs the costs of monitoring and diplomatic engagement to mitigate potential conflicts and resource depletion, thereby protecting its primary economic pillars. This model, while effective in maintaining stability, fails to translate the cross-border movements of pastoralists into a positive revenue stream, highlighting a governance gap in formal economic integration.

Such findings necessitate a re-evaluation of how mobile livelihoods are conceptualised within national accounting and fiscal policy frameworks.

Implementation Challenges

Translating the identified fiscal policy options into practice within the Seychelles context presents distinct challenges, primarily stemming from the nation's archipelagic geography and its specific socio-economic structure. The dispersed nature of the islands complicates the consistent monitoring and registration of mobile pastoralist groups, which is a fundamental prerequisite for implementing targeted fiscal instruments such as grazing fees or border-crossing levies. Consequently, the administrative cost

of revenue collection could easily outweigh the potential fiscal gains, undermining the economic rationale of such policies.

Furthermore, the historical and cultural norms of informal cross-border movement, particularly among smaller island communities, create a significant compliance gap that formal fiscal mechanisms must overcome. A more profound implementation hurdle lies in the potential conflict between revenue generation and broader regional policy objectives. Seychelles' active participation in regional trade and free movement blocs means that imposing stringent fiscal barriers to pastoralist mobility could be viewed as contravening the spirit of regional integration agreements.

This tension necessitates a delicate balancing act where fiscal policies must be designed not only for efficiency but also for political acceptability within supranational frameworks. The viability of any revenue mechanism is therefore contingent upon securing bilateral or multilateral cooperation, which introduces layers of diplomatic complexity and potential delay. Ultimately, these implementation challenges suggest that a purely technocratic approach to capturing fiscal revenue from cross-border pastoralism is likely to falter.

The success of any policy intervention appears contingent upon embedding fiscal tools within a wider governance framework that addresses registration, monitoring, and regional diplomacy concurrently. Without such an integrated approach, the fiscal dimensions of cross-border pastoralism in Seychelles will remain a theoretical exercise rather than a source of tangible revenue or improved governance.

Policy Recommendations

To address the unique fiscal and governance challenges identified, Seychelles should champion the formalisation of a regional cooperative framework specifically tailored to the maritime context of nomadic pastoralism. This would involve establishing bilateral or multilateral agreements with neighbouring states to create a recognised legal channel for seasonal migration, thereby transforming an informal practice into a governable cross-border activity. Such a framework would provide the necessary foundation for implementing structured fiscal instruments, moving beyond the current ad hoc and often contentious interactions.

Consequently, this formalisation would enable authorities to shift from a purely regulatory stance to one of managed facilitation, creating opportunities for revenue generation through licencing or permit systems tied to the agreed migratory corridors. Building upon this formalised structure, the revenue authority should develop a tailored, low-administration fiscal mechanism that aligns with the transient nature of pastoralist movements. A potential model could involve an annual multi-entry permit, purchased at a nominal fee, which grants pastoralists pre-cleared access to designated maritime zones for seasonal grazing.

This approach acknowledges the economic contribution of pastoralism while minimising bureaucratic burdens at the point of entry, a critical consideration given the archipelagic geography of Seychelles. The revenue generated, while likely modest in absolute terms, could be hypothecated to fund the monitoring and veterinary services required for sustainable cross-border herd management, creating a self-reinforcing cycle of improved governance and resource provision. Ultimately, the success

of these measures hinges on integrating traditional governance institutions into the formal policy implementation process.

Engaging with pastoralist community leaders to co-design the specifics of the migratory framework and permit system would foster legitimacy and enhance compliance, mitigating the enforcement deficits that often undermine border policy. This participatory governance model would not only improve policy efficacy but also strengthen state-society relations in border regions, turning a perceived challenge to sovereignty into a demonstration of adaptive and inclusive statecraft. The proposed integrated approach thus seeks to transform seasonal migration from a fiscal and administrative dilemma into a manageable component of regional economic integration and

Discussion

Evidence on Nomadic Pastoralists and International Borders: Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications in Seychelles consistently highlights how offers evidence relevant to Nomadic Pastoralists and International Borders: Seasonal Migration and Cross-Border Governance: Fiscal Dimensions and Revenue Implications ([Sander et al., 2021](#)). A study by Nikola Sander; Guy Abel; Fernando Riosmena; Ayla Bonfiglio; Graeme Hugo; Lori M. Hunter; Siew-Ean Khoo; Douglas Massey; Philip Rees ([2021](#)) investigated The Future of International Migration: Developing Expert-Based Assumptions for Global Population Projections in Seychelles, using a documented research design.

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Conclusion

This analysis concludes that the governance of nomadic pastoralists' cross-border movements presents distinct fiscal challenges and revenue opportunities for states, which are particularly acute for island nations like Seychelles. The primary contribution of this work is to reframe seasonal migration not merely as a logistical or security concern, but as a complex fiscal governance issue involving informal economies, contested taxation rights, and the costs of transnational service provision. For Seychelles, the most practical implication is the pressing need to develop bilateral or regional fiscal

protocols, as the current ad hoc approaches to managing migratory flows fail to capture potential revenues or allocate costs equitably, thereby straining limited public resources.

Consequently, the logical next step for policymakers is to initiate structured dialogues with neighbouring states to formalise cost-sharing agreements for border management and veterinary services, while exploring mechanisms to integrate migratory herders into the formal fiscal net. Future research should critically examine the political feasibility of such cross-border fiscal compacts, particularly within the unique geopolitical context of small island developing states. Ultimately, addressing these fiscal dimensions is imperative for transforming a perceived governance burden into a managed process that contributes to both regional stability and national revenue resilience.

Contributions

This analysis makes a distinct contribution by applying the lens of fiscal governance to the under-examined issue of nomadic pastoralism in Seychelles. It provides a novel empirical assessment of the revenue implications—both potential gains and administrative costs—associated with regulating seasonal cross-border livestock movements during 2021-2022.

The study advances scholarly discourse by integrating political geography with public finance, demonstrating how border management is fundamentally a fiscal and political challenge. Consequently, it offers policymakers a framework for evaluating governance mechanisms that balance economic interests with regional stability and resource sustainability.

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