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Socio-Economic Barriers to Sustainable Development in Burkina Faso

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ABSTRACT

The Western Sahel has garnered global attention due to its complex and interconnected challenges, economic fragility, political instability, and environmental pressures, making it a critical research area. Focusing on Burkina Faso, this study analyses sociopolitical barriers (e.g., governance deficits, inequality) and economic growth through a two-stage framework. First, a multivariate regression (2010–2022) was used to assess macroeconomic partial effects, followed by a principal component analysis to address collinearity and uncover latent structural patterns. Our findings reveal that sustainable growth requires the strengthening of democratic institutions, economic diversification, enhanced security, and inclusive development strategies, highlighting the need for multidimensional approaches to address systemic interdependencies in post-conflict economies. The article is structured as follows: Introduction (Section 1), Methodology (Section 2), Results and Discussion (Section 3), and Conclusions and Recommendations (Section 4).

JEL Classification: C 13, O 11, O 47, O 55

1 | Introduction

The Sahel, a border region separating the Sahara Desert from the savanna, spans 10 states home to approximately 400 million people, most of which gained independence from France or Great Britain in the mid-20th century. Characterised by weak institutional capacity, these states struggle to promote social rights or manage external debt, perpetuating a cycle of challenges that hinder sustainable development across the region. Experts attribute this fragility to intersecting factors such as climate change, conflicts over natural resources, political and religious extremism and the proliferation of weapons. While armed confrontations remain primarily national in scope, the growing involvement of external actors has intensified civilian casualties and displacement, affecting millions of affected people. To address these issues, it is necessary to prioritise objectives and

analysing synergies to optimise resource allocation (Madeimov and Li 2019; Abdi et al. 2023; Sawadogo et al. 2024).

These countries share cultural ties rooted in geography, religion, migration, and trade, which have fostered agricultural and pastoral similarities while creating interconnected communities over centuries. Despite these unifying factors, historical trajectories have led to divergent national outcomes. The Sahel is commonly divided into two subregions: the Western Sahel (Mauritania, Senegal, Mali, Burkina Faso and Niger), formerly part of French West Africa until 1960, and the Greater Horn of Africa (Djibouti, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda, with Chad occasionally included due to its ties to Sudan). While the Western Sahel nations now belong to the Economic Community of West African States (ECOWAS), their historical trade and migration networks also

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connect them to North Africa, particularly Mauritania, Mali, Niger and Chad (Walther and Retaille 2021; Bouragba and Aissat 2025). In contrast, the Greater Horn exhibits distinct ethnic, linguistic, and political dynamics, with strong ties to East Africa and the Arab world. This subregion faces heightened instability, hosting more rebel and separatist movements than the Western Sahel, which challenge borders and intensify conflicts.

While the Sahel shares regional commonalities, fundamental disparities exist between individual countries, with some prospering while neighbouring states experience decline. Since 2012, the particularly acute deterioration in Mali, Burkina Faso, and Niger stems from challenges in consolidating nations with institutions inherited from French colonisation, struggling to build trust among ethnically and linguistically diverse populations. These difficulties were compounded by the economic and financial crises of the 1980s to 1990s, which weakened state capacity and increased dependence on international institutions while failing to address spatial inequalities through effective public service monitoring (Cour 2001). Politically, despite periodic elections, democratisation remains fragile, with power often concentrated among groups benefiting from proximity to governing elites.

Stabilising the Sahel is critical for sustainable economic development, although progress remains uneven. While countries such as Benin, Côte d'Ivoire, and Senegal have achieved significant growth, addressing regional security risks and volatility is required to sustain this growth (Coly et al. 2024). The Sahel risks becoming one of the world's most unstable regions, marked by power struggles over mineral resources and escalating jihadist threats. Since 2012, armed extremism, beginning with the Azawad rebellion in Mali in 2012 and spreading to Niger (2013), Burkina Faso (2015), and at least eight other West African states, has exploited security vacuums left by withdrawn French troops and failed UN peacekeeping efforts (Barlow et al. 2021).

Regional cooperation must be revitalised to counter these trends. International financial institutions should prioritise education, vocational training, and local economic stimulation through coordinated reforms. Meanwhile, geopolitical shifts are reshaping the Central Sahel (Mali, Burkina Faso, Niger), where military juntas have abandoned Western partnerships for alliances with Russia and China, further fragmenting the Economic Community of West African States (ECOWAS).

The Central Sahel has become particularly vulnerable, serving as an operational hub for multiple non-state armed groups, several of which are designated terrorist organisations. Burkina Faso, Mali and Niger, all experiencing military coups between 2020 and 2023, now rank among the world's 10 most terrorism-affected countries (Institute for Economics and Peace 2025).

The political instability of the Sahel reached a critical juncture with successive military coups, Mali's dual-phase take-over (2020–2021), the twin patches of Burkina Faso (2022), and Niger's 2023 overthrow, all justified by civilian governments' failure to secure national territories. This governance vacuum has enabled extremist groups to establish parallel administrations, providing basic services and justice while deliberately

undermining state institutions. Despite ECOWAS' attempts to maintain regional stability through sanctions and military intervention (particularly after Niger's coup), the state's weak presence in certain areas has allowed extremist groups to position themselves as providers of resources and enforcers of justice by maintaining order, distributing food, and managing land disputes. These groups have deliberately weakened state institutions, creating parallel governance structures.

In January 2024, the Alliance of Sahel States (AES), comprising Mali, Niger, and Burkina Faso, announced its withdrawal from the bloc. Since then, these nations have prioritised military procurement over diplomacy, thereby worsening regional fractures. Compounding these challenges, climate change continues to disrupt traditional livelihoods and food security (Dossa et al. 2023), creating additional pressure on already fragile systems.

Recent initiatives aim to enhance regional cooperation to address the Sahel's multifaceted crises. The Tony Blair Institute's 2024 report 'A New Sahel Pact' outlines a comprehensive framework that combines governance reforms, security measures and economic development strategies (Tony Blair Institute for Global Change 2024). This approach focuses on aligning resource management with security priorities while building stronger partnerships with West African governments to prevent further destabilisation. Complementing these efforts, the EU's Regional Advisory and Coordination Cell (RACC) has supported G5 Sahel countries since 2019 in strengthening defence capabilities, human rights protections, and gender-responsive security policies under its Women, Peace, and Security agenda. Together, these international and regional initiatives seek to establish sustainable stability frameworks before the region's deterioration becomes irreversible.

In summary, the Sahel's path to sustainable development is hindered by complex challenges (Villalon 2021), while simultaneously becoming an arena for global power competition. Russia has capitalised on regional instability to expand its influence, deploying the Wagner Group in Mali before France's withdrawal and securing access to strategic resources such as uranium. The Ukraine war intensified tensions, making Franco-Russian co-operation impossible and prompting Mali's full alignment with Moscow by August 2022. This pattern was repeated following coups in Burkina Faso (2022) and Niger (2023), transforming the regional conflict from a counterterrorism effort into a proxy confrontation that ultimately diminished French influence. Although France maintained a residual presence, the withdrawal of French troops, EU training missions, and MINUSMA marked a strategic retreat (Horak et al. 2024).

The Sahel's geopolitical landscape has undergone a dramatic transformation, marked by shifting arms partnerships and emerging resource deals. Between 2020 and 2021, Turkey quadrupled its weapons sales to Africa from 2020 to 2021, with particular focus on the region. Meanwhile, China and the UAE have become major suppliers of low-cost military equipment (Donelli and Cannon 2025). Simultaneously, in May 2024, Iran began uranium-for-energy negotiations with Niger, illustrating the region's integration into global resource networks. These developments occurred during the collapse

of traditional power structures, where the authoritarianism of the military juntas, Russia's expanding influence, and chronic insecurity created a crisis with transnational dimensions. The effects are palpable beyond Africa. Malians now constitute 43% of migrants arriving in Spain's Canary Islands (January–July 2024), with over 100,000 reportedly preparing to make the journey (Okafor et al. 2023). Given this complexity, our analysis methodologically focuses on the Alliance of Sahel States (Mali, Niger, Burkina Faso), a strategic subgroup that exemplifies these dynamics through its withdrawal from the ECOWAS in January 2024 and its collective security approach (Toure et al. 2024).

In terms of economic aspects, the Sahel region faces acute vulnerabilities that severely constrain sustainable GDP growth. Despite abundant natural resources, including gold, uranium, and untapped agricultural potential, these countries grapple with persistent structural weaknesses, which are compounded by regional instability and climate shocks.

Escalating jihadist insurgencies have compelled governments to prioritise military spending, diverting critical funds from infrastructure and social services. Trade disruptions, such as the ECOWAS sanctions imposed on Niger in 2023, have further strained cross-border commerce and intensified food insecurity. Economies remain overly reliant on volatile commodity exports: gold and uranium constitute the primary revenue streams of Mali and Niger, while Burkina Faso's undiversified gold-dependent economy exposes it to global price fluctuations. Meanwhile, agriculture-employing 60%–80% of the workforce faces mounting threats from climate-induced droughts and desertification.

Political instability, including recurrent coups since 2020, has deterred foreign investment, leading to a marked decline in foreign direct investment (FDI) inflows. Chronic infrastructure deficits, particularly in energy and transportation, inflate production costs and hinder regional trade integration. These challenges are amplified by the demographic pressures of the Sahel, with population growth rates among the world's highest, far outpacing job creation and fuelling mass migration and economic informalization.

By addressing critical policy gaps, this study contributes to the pursuit of sustainable and equitable development in Burkina Faso. While existing research has typically focused on narrow aspects of development in fragile states, our analysis provides novel quantitative and qualitative evidence to identify systemic weaknesses. The findings offer policymakers targeted guidance on key dimensions requiring intervention to break cycles of poverty and unsustainable growth.

Subsequent analysis will focus on Burkina Faso, a country grappling with multiple crises. Burkina Faso has undergone repeated political transitions since the late 1990s, including the protracted rule of the Compaoré administration (1987–2014), which ended in a popular uprising. This event triggered enduring instability, culminating in military coups in 2022 that severely weakened governance, disrupted institutional frameworks and hindered the implementation of development policies (African Export-Import Bank 2024).

The proliferation of armed groups since 2016 has severely impacted economic activity, particularly in rural areas. This has resulted in declining agricultural output and the closure of numerous small businesses. Moreover, the destruction of critical infrastructure (bridges and roads) has disrupted trade networks and commodity transportation (Dedewanou and Kpekou Tossou 2022; Iyabano et al. 2022) (Figure 1).

Institutional fragility and systemic corruption have hindered democratic consolidation, fostering widespread public distrust that has intensified with violent extremism. The expansion of jihadist groups, particularly Jama'at Nasr al-Islam wal Muslimin (JNIM) and the Islamic State in the Greater Sahara, has created chronic insecurity that further weakens state institutions (Issaev et al. 2022).

The year 2022 witnessed successive military coups (January and September) led by Ibrahim Traoré, accompanied by repeated states of emergency (Engels 2022; Haavik et al. 2022). Concurrently, the Group for the Support of Islam and Muslims (GSIM) and Islamic State Sahel Province recorded unprecedented violence in 2023, with the International Terrorism Studies Observatory documenting 71 fatalities between January and May.

Burkina Faso's economic growth has fluctuated between 4% and 6% annually since 1990, though recurrent political crises and terrorist attacks have consistently disrupted this trajectory. While the 2000s saw accelerated expansion driven by structural reforms and FDI, the 2010s were marked by the development of the gold mining sector, which reshaped the country's economic landscape. Historically, agriculture accounted for over 30% of GDP in the 1990s (Nyamekye et al. 2018), but its share has steadily declined due to the rise of mining. Despite this shift, cotton, sesame, and cereal production remain critical for rural livelihoods, even as the sector grapples with challenges such as limited input accessibility, soil degradation and climate variability (Bado et al. 2022; Bationo et al. 2025; Okunade et al. 2025). Compounding these issues, Burkina Faso faces severe climatic conditions, including recurrent droughts and advancing desertification, which threaten food security by undermining subsistence agriculture (Crookston et al. 2021; Aguirre-Unceta 2023).

The economy remains heavily reliant on agriculture, mining and trade, with cotton and gold serving as the primary growth drivers, though both are vulnerable to global price fluctuations (Brugger and Zongo 2023). Meanwhile, the rural economy's viability hinges on access to land, water and markets, as well as government support and the ability of rural populations to organise freely and influence policy-making (Bouda et al. 2011; El Bilali et al. 2022).

Gold mining has become a cornerstone of Burkina Faso's economy, accounting for approximately 70% of the country's total exports. However, the sector's rapid expansion has been accompanied by significant challenges, including widespread illegal mining and weak regulatory oversight. These issues have led to severe environmental degradation and social problems, such as child labour and the financing of armed groups. In 2021, estimates suggested that up to 80% of the gold produced in Burkina



FIGURE 1 | Conflict in Burkina Faso. *Source:* Piatti, M. and Fraser, M. Burkina Faso Geopolitical Risk Assessment. Available in: <https://londonpolitica.com/africa-watch-blog-list/burkina-faso-risk-assessment>.

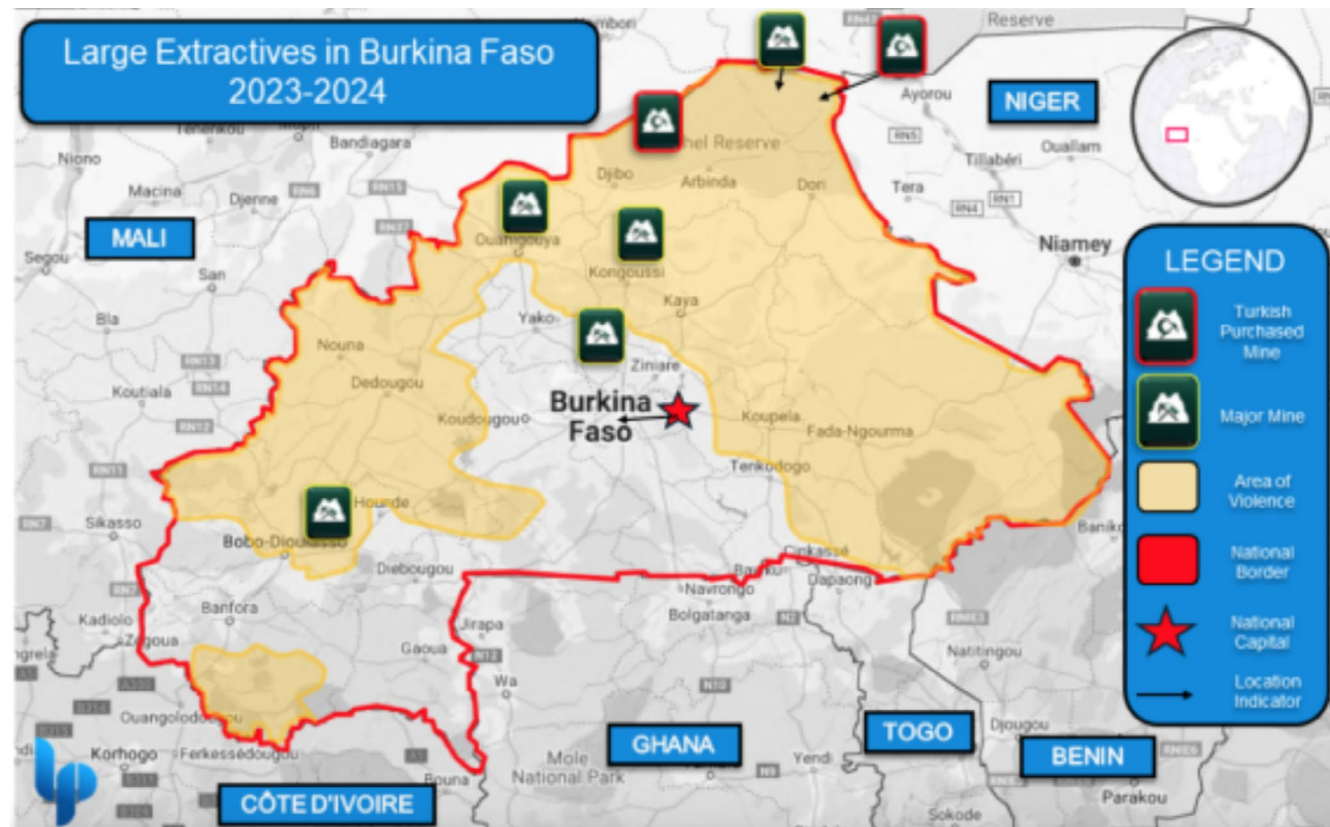


FIGURE 2 | Mining and violence. *Source:* Piatti, M. and Fraser, M. Burkina Faso's Geopolitical Risk Assessment. Available from: <https://londonpolitica.com/africa-watch-blog-list/burkina-faso-risk-assessment>.

Faso originated from unregulated artisanal mining operations (United Nations Office on Drugs and Crime 2023), highlighting the need for improved governance and enforcement in the sector (Figure 2).

Public administration in Burkina Faso encompasses multiple dimensions, including the civil registry system, statistical capacity, public sector professionalism, fiscal efficiency in revenue mobilisation and budget management, as well as citizen perceptions of bureaucratic processes, such as obtaining identity documents. Infrastructure development focuses on transportation networks, postal and maritime services, energy access, and digital connectivity through mobile phones, computers and internet availability, all of which influence public perceptions of infrastructure quality. While investments have targeted the energy and transport sectors, significant gaps persist, particularly in rural electrification, where only 19% of the population had access to electricity in 2021, constraining industrial development and quality of life improvements.

The country's foreign trade maintains a structural deficit, partially mitigated by foreign aid and gold (now accounting for over 70% of export earnings) and cotton (previously dominant until the early 21st century) exports. Since 1990, Burkina Faso has diversified its trade partnerships, notably with the European Union and China, though persistent imports of energy and food products continue to pressure the trade balance (Ayeh 2021; European Union 2022).

Through major agencies like the World Bank, IMF and European Union, foreign aid has played a pivotal role in financing critical infrastructure, education and health projects. During the 2000s, official development assistance represented approximately 10% of GDP, supporting health infrastructure, educational programs and food security initiatives. However, escalating political instability and security concerns in recent years have significantly impacted the flow of international funding, jeopardising development progress.

2 | Methodology

This study aims to demonstrate how current circumstances in Burkina Faso hinder the path towards sustainable and more equitable development in the future. To this end, we first examine the evolution of key sociopolitical variables that shape the prospects for sustainable development in the coming years. In the second phase, an econometric analysis is employed to assess the impact of critical factors on economic growth in such contexts.

Regarding socio-political aspects (governance, instability, or inequality), our findings reveal systemic barriers that require targeted policy interventions. The Ibrahim Index of African Governance (IIAG) has been a very useful source with variables that measure and monitor governance performance in African countries. Published since 2007, the IIAG was created to provide a quantifiable tool to measure and monitor governance performance in African countries, to assess their progress over time, and to support the development of effective policy solutions, giving visibility to the problem and allowing us to adequately

address the research objective. Data are available from 2014 to 2023 (Mo Ibrahim Foundation 2022; The Ibrahim Index of African Governance 2025).

The second part of the analysis employs an OLS regression to examine economic variables in Burkina Faso. This widely accepted technique offers key advantages, particularly its ability to uncover relationships between variables, thereby informing policy decisions and measures to mitigate or reverse adverse socioeconomic conditions.

OLS regression is a robust data-fitting tool characterised by flexibility, ease of implementation, error minimisation, and statistical interpretability. It efficiently models variable relationships, providing insights and predictive capabilities into complex phenomena. However, as our case demonstrates, OLS is not always optimal; thus, we complement it with additional techniques.

OLS regression is a foundational tool for modelling linear relationships between dependent and independent variables. However, its reliability diminishes under certain conditions, particularly when multicollinearity exists among predictors. Principal Component Analysis (PCA) offers a viable solution by transforming correlated variables into an orthogonal (uncorrelated) set of components. In some scenarios, integrating PCA with OLS is warranted: high multicollinearity among predictors. OLS estimates become unstable when predictors are highly correlated; OLS estimates become unstable, increasing variance and reducing interpretability. PCA generates principal components that are linearly independent, preserving explanatory power while eliminating collinearity. A high variance inflation factor ($VIF > 10$) or a condition index > 30 signals severe multicollinearity, justifying PCA.

PCA sacrifices interpretability (abstract PCs) for predictive accuracy. It must be used when the research goal is prediction rather than causal inference (Jolliffe 2002).

For the economic analysis, the World Bank provides standardised metrics, and all computations were performed using Stata.

Understanding the multidimensional determinants of economic growth in fragile states requires methodological approaches that account for both observed variable relationships and latent structural patterns. This study examines Burkina Faso's GDP growth dynamics using a two-stage analytical framework.

First, a multivariate regression analysis is performed to quantify the partial effects of key macroeconomic, institutional, and conflict-related variables (2010–2022). The selected predictors (including infrastructure investment, security expenditure, agricultural productivity and governance indicators) are theoretically grounded in endogenous growth models (Barro 1990; Acemoglu et al. 2005) and adapted to the context of fragility in the Sahelian regions.

However, given the high collinearity among development indicators in post-conflict economies (Hartmann et al. 2017), regression results alone may obscure deeper structural interdependencies. Thus, the second stage applies principal component

TABLE 1 | Regression results: determinants of GDP growth.

Variable	Coefficient results	<i>p</i>	Interpretation
Agriculture	1.42	0.120	Not significant ($*p > 0.05$). Although positive, no statistical evidence supports its influence on GDP.
Exports	1.23	0.018*	Significant ($*p < 0.05$). Increased exports are associated with higher GDP.
Foreign direct investment	0.12	0.885	Not significant. Negligible effect on GDP in this model.
Gross capital formation	0.33	0.626	Not significant.
IBRD/IDA loans	1.20	0.125	Not significant. Positive coefficient but no confirmed effect.
Net official assistance	0.47	0.732	Not significant.
Intercept (_cons)	$2.16 \times 10^{+09}$	0.223	Not significant.

Note: Model overview.

Dependent variable: Gross Domestic gross domestic product (GDP) in lars).

Independent variables: Agriculture, Exports, Foreign Direct Investment, Gross Capital Formation, IBRD/IDA Loans, Net Official Development Assistance.

Number of observations: 18.

$R^2 = 0.9865$ → The model explains approximately 98.65% of the variation in GDP, indicating a very high fit.

F-test (p -value = 0.0000). The model is highly significant overall.

analysis (PCA) to reduce dimensionality and identify latent factors shaping growth trajectories (Jolliffe and Cadima 2016). The combined methodology offers novel insights into the operation of Burkina Faso's growth constraints, which operate at both observable and systemic levels.

Using linear regression analysis on key variables (agricultural output, exports, foreign direct investment, gross capital formation, IBRD/IDA Loans and Net Official Development Assistance) for the period 2005 to 2022, it is possible to quantify their respective contributions to GDP formation (Table 1).

The regression analysis reveals that, among the considered variables, only goods and services exports exhibited a statistically significant positive effect on GDP (coefficient = 1.23, $*p = 0.018$). This suggests that higher export levels are strongly associated with increased economic output in Burkina Faso. In contrast, other variables, including agricultural value added, foreign direct investment (FDI), gross capital formation, World Bank loans and official development assistance (ODA), did not demonstrate statistically significant effects on GDP.

Diagnostic tests revealed that the model suffers from severe multicollinearity, as indicated by a mean variance inflation factor (VIF) of 12.76, with several individual VIFs exceeding 10 (Exports = 34.29, Agriculture = 13.07, Gross Capital Formation = 13.16). Although the overall model retains predictive power, this high multicollinearity distorts the interpretation of individual coefficients. To mitigate this issue, we recommend either reducing the number of explanatory variables or applying Principal Component Analysis (PCA) to condense correlated predictors into orthogonal components.

Heteroskedasticity. The Breusch–Pagan test ($*p = 0.0164$) rejects the null hypothesis of homoskedasticity, indicating heteroskedasticity (non-constant variance in residuals). To address this, future estimations should employ robust standard errors (Huber-White correction) or alternative estimation techniques such as generalised least squares (GLS) to address this issue.

TABLE 2 | Explained variance summary.

Component	Eigenvalue	Proportion	Cumulative
Comp1	5.43	0.7750	0.7750
Comp2	1.45	0.2075	0.9826
Comp3	0.27	0.0390	0.9866
Comp4-7	Very low	≈0.01 or less	≈1.0

Note: Component 1 explains 77.5% of the total variance.

The second component (Comp2) adds an extra 20.75%.

The first two components capture 98.26% of the total data variability.

Despite these econometric challenges, the model explains 98.65% of the variance in GDP (adjusted $R^2 = 0.9865$) and is globally significant ($*p < 0.01$). The findings suggest that export-oriented strategies may be the most impactful driver of Burkina Faso's GDP growth within this framework. However, given the methodological limitations, particularly multicollinearity and heteroskedasticity, caution is warranted in drawing causal inferences.

To address dimensionality and multicollinearity, a Principal Component Analysis (PCA) was conducted on seven economic variables. This technique reduces redundancy while preserving maximal variance, offering a more parsimonious representation of the underlying economic structure.

Therefore, data can be interpreted in two dimensions with minimal information loss (Table 2).

In Table 3, Comp1 exhibits strong negative loadings for most variables, particularly Agriculture, Exports, FDI, and GDP per capita, suggesting that it represents a general economic development axis: more negative scores correlate with higher development levels. Notably, Agriculture and GDP per capita are strongly linked in Comp1, implying a negative relationship between Burkina Faso's agricultural dependence and economic development. Net Official Assistance also shows moderate negative loading, indicating that higher aid correlates with lower development scores.

TABLE 3 | Factor loadings (Eigenvectors—bottom table).

Variable	Comp1	Comp2
Agriculture	−0.503	0.255
Exports	−0.403	0.855
Foreign direct investment (FDI)	−0.408	−0.306
GDP per capita	−0.418	0.206
Gross domestic product (GDP)	−0.383	0.200
IBRD loans	−0.160	−0.614
Net official assistance	−0.331	−0.458

Comp2 contrasts export-oriented economies (high positive loading for exports, 0.855) with external financial dependence (negative loading for IBRD Loans, −0.614).

Comp3 onward explains negligible variance (<4%) and can be disregarded. Comp1 (77.5% variance) and Comp2 (20.75% variance) capture 98.26% of total variance, effectively reducing the analysis to two dimensions.

3 | Results and Discussion

Despite measurable progress in education and health, Burkina Faso continues to face profound challenges in human development. While literacy rates have improved, education quality suffers from systemic resource shortages (Konfe Tiendrebeogo and Reeder 2023), a situation exacerbated by security crises. Armed group attacks forced the closure of over 5000 schools in 2022 alone, disrupting education for 700,000 children. Similarly, health sector gains in life expectancy are undermined by persistent barriers, including inadequate medical infrastructure, critical staff shortages, and enduring public health threats like malaria and malnutrition (Food and Agriculture Organization 2023).

The country's humanitarian situation has sharply deteriorated due to escalating violence, which has displaced approximately 2 million people, destabilised communities, and severely limited access to basic services (Lamarche 2023). This crisis has intensified extreme poverty in conflict zones, compounding the challenges of existing development. Although certain economic sectors show growth, 40% of the population remains below the poverty line, with gender inequality presenting additional obstacles: merely 9% of working-age women participate in formal employment (Sepahvand 2022; Karambiri et al. 2024).

Three key indicators reveal the precarious development conditions and limited progress of Burkina Faso. The Human Development Index (HDI), measuring health, education, and living standards, shows the country's significant challenges. With a 2022 score of 0.438, Burkina Faso ranks 185th of 193 nations in the Low Human Development category. While longitudinal data (1999–2022) demonstrates notable improvements, including a 49% HDI increase, a 9.4-year rise in life expectancy, 4.8 additional expected schooling years and 58.7% growth in GNI per capita, these gains remain insufficient to overcome systemic development barriers.

As measured by the Gender Development Index (GDI), gender inequality presents additional obstacles. Burkina Faso ranks 150th of 166 countries (2021), with women experiencing substantial disadvantages: 1.1 fewer schooling years than men and 36% lower GNI per capita. Although policy measures like political gender quotas have been implemented, entrenched cultural norms and persistent poverty continue to hinder gender parity. Collectively, these indices underscore Burkina Faso's ongoing struggle to translate sectoral progress into comprehensive human development.

3.1 | Multidimensional Poverty Index

The Multidimensional Poverty Index (MPI) provides a comprehensive assessment of overlapping deprivations in health, education, and living standards, offering a more nuanced perspective than income-based measures alone. Burkina Faso's 2023 MPI score of 0.418 ranks as the sixth highest globally among 110 assessed countries, with 63.6% of the population experiencing multidimensional poverty. The education dimension (contributing 33.1% to the MPI score) reveals severe challenges: 48% of children aged 6 to 14 are out of school, while 76% of adults have fewer than 6 years of education. Health deprivations (30.5% contribution) include concerning indicators such as an 8.4% mortality rate among children under 5 years of age and 30% prevalence of stunting among children under five. Living standards (36.4% contribution) show particularly acute deficits, with 94% of the population relying on solid fuels like firewood, 76% lacking improved sanitation facilities, and 81% without electricity access (Oxford Poverty and Human Development Initiative and United Nations Development Programme 2023). These intersecting deprivations create compounding barriers to development, with particularly severe impacts on vulnerable populations.

As evidenced in the accompanying figures, the country ranks among the least advanced in the aforementioned dimensions. However, progress will now be made on other dimensions of the country's reality to systematically examine the root causes of this developmental stagnation (United Nations Development Programme 2023a, 2023b).

3.2 | Governance Framework

The governance framework of Burkina Faso rests on four interconnected pillars that collectively shape national development. The Security and Rule of Law component addresses fundamental state functions through four critical elements: (1) maintaining public safety, (2) ensuring judicial integrity, (3) promoting governmental accountability and (4) implementing anti-corruption measures. Parallel to this, the Participation, Rights and Inclusion dimension evaluates democratic vitality through (1) levels of political engagement, (2) protection of civil liberties and (3) progress on gender equality indicators.

The Foundations for Economic Opportunity pillar encompasses four operational domains: (1) Public Administration (assessing civil service efficiency, fiscal management, and bureaucratic capacity); (2) Business Environment (analysing market

TABLE 4 | Overall governance and four other items in the Burkina Faso.

Measures	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change 2014–2023
Overall governance	54.9	55.6	56.3	58.0	58.2	56.4	55.8	54.5	52.6	51.0	–3.9
Security and the rule of law	57.6	59.1	60.5	62.8	63.0	59.4	57.6	54.2	49.2	47.7	–9.9
Participation, rights, and their inclusion	63.7	63.7	63.6	67.0	66.7	64.6	64.9	64.0	61.5	56.0	–7.7
Foundations for economic opportunity	50.0	50.9	51.2	51.2	51.7	51.2	50.8	50.3	50.2	50.5	+0.5
Human development	48.4	48.6	50.2	51.2	51.3	50.0	50.1	49.6	49.7	49.9	+1.5

Note: Dark grey shade, lowest scores; Light grey shade, highest scores.

Source: The Ibrahim Index of African Governance Data.

diversification, labour regulations, and financial inclusion); (3) Infrastructure (evaluating transportation networks and digital connectivity); and (4) Rural Economy (focusing on agricultural policies and rural representation). These economic foundations interact directly with the fourth pillar of human development, creating an integrated governance ecosystem where security, participation, economic opportunity, and human capital development mutually reinforce or constrain national progress.

This component measures progress in: (1) healthcare systems, (2) educational quality, (3) social welfare programmes and (4) environmental sustainability (Freedom House 2023; World Bank 2023b; International Monetary Fund 2024; Briceno-Garmendia and Dominguez-Torres 2011).

Table 4 illustrates Burkina Faso's governance trajectory from 2013 to 2022, as measured by the Ibrahim Index of African Governance (IIAG) across five critical dimensions. The data highlight a concerning deterioration in two key areas: Security and Rule of Law experienced the most dramatic decline (–9.9 percentage points), followed closely by Participation, Rights, and Inclusion (–7.7 points). Conversely, the Foundations for Economic Opportunity and Human Development demonstrated relative stability, registering modest gains (+0.5 and +1.5 points, respectively). This divergent performance resulted in an overall governance decline of 3.9 points over the decade, despite temporary improvements during 2017–2018. The findings underscore a troubling paradox: while Burkina Faso has maintained basic economic and social development progress, its foundational governance pillars, particularly security and civil liberties, have significantly weakened, suggesting systemic vulnerabilities that threaten long-term stability.

3.3 | Security and Rule of Law (–9.9 Points)

The precipitous decline in this dimension stems primarily from the proliferation of jihadist insurgents in the Sahel region, which has eroded the authority of the state in rural areas (ACLED 2023). By 2022, an estimated 80% of Burkina Faso's territory lay beyond effective state control (Institut Montaigne 2023). Contributing factors include the military coups (2022), which destabilised institutional frameworks and abuses by pro-government militias, exacerbating public distrust in state legitimacy.

3.4 | Participation and Inclusion (–7.7 Points)

This regression was driven by post-coup restrictions, such as bans on political parties and media censorship. Reporters Without Borders (2023) ranked Burkina Faso 156th in press freedom, reflecting shrinking civic space. Structural inequities further intensified exclusion. Ethnic marginalisation and centralised governance alienated northern communities (Tuareg, Fulani), fuelling resentment. Crackdowns on NGOs, 65% of civil society organisations reported state harassment.

3.5 | Economic Opportunity (+0.5 Points)

Despite 5% average GDP growth (2014–2022), stagnation persists due to corruption, gold dependency (70% of export) with a lack of value-chain diversification and capital flight (annual losses equivalent to 3% of GDP).

3.6 | Human Development (+1.5 Points)

Marginal gains reflect EU-funded health programmes (e.g., 15% rise in vaccine coverage, yet chronic challenges endure), education underinvestment (12% of budget allocated versus UNESCO's 20% benchmark) and malnutrition (32% child stunting rates cap progress).

Table 5 reveals starkly divergent trends in Burkina Faso's socio-political landscape between 2013 and 2022. While health (+7.3 points) and education (+5.9 points) demonstrated measurable progress, social protection and welfare declined by an alarming 8.5 points, exposing critical systemic vulnerabilities. The improvement in the health sector (55.6 points in 2022) likely reflects concentrated donor investments in primary care. Rural maternal mortality rates remain triple those in urban areas, though significant disparities persist. Educational gains plateaued around 50 points, constrained by chronic underfunding (just 12% of national budget allocation versus UNESCO's recommended 20% benchmark). The dramatic welfare collapse correlates directly with post-2020 austerity measures and security budget prioritisation (defence spending reached 40% of the 2022 budget). Paradoxically, political empowerment scores surged to 84.4 points (+5.8), though this likely reflects elite

co-option strategies rather than genuine grassroots inclusion (Carbone 2022). These trends collectively depict a ‘two-speed’ governance model characteristic of Sahelian states, one that sacrifices social equity for security priorities while permitting selective sectoral advancements.

Table 6 reveals stark disparities in Burkina Faso’s economic governance between 2013 and 2022, with infrastructure improvements (+8.9 points) contrasting sharply with systemic deterioration across other sectors. The infrastructure gains (from 22.7 to 31.3 points) primarily reflect China-funded transport projects, yet Burkina Faso still ranks among Africa’s weakest (3rd lowest score), with 62% of new roads (2017–2022) concentrated in the more secure south. These gains remain unevenly distributed—rural electricity deficits and jihadist control in the northern territories (40% of the country) have disrupted 40% of road projects and hindered maintenance.

Meanwhile, the business environment deteriorated by 4.2 points, compounded by persistent bureaucratic obstacles, as rising insecurity forces 85% of firms to allocate over 10% of revenue to security (Economist Intelligence Unit 2023). The rural economy declined by 2.7 points (2014–2022), with climate shocks reducing crop yields by 30% and displacing 2 million farmers (UNHCR 2023). Public administration stagnated during frequent cabinet reshuffles (5 governments since 2015) and corruption consuming 20% of contracts (Transparency International 2022).

These trends demonstrate how physical capital investments alone cannot stimulate private sector growth in Sahelian states affected by conflict. As Collier (2009) observes, security-deficient infrastructure development creates ‘islands of development’ that exacerbate regional inequalities. Weak institutions fail to translate infrastructure into growth-enabling policies (Besley and Persson 2011), while military-linked contracting distorts markets through patronage (Acemoglu and Robinson 2012).

4 | Conclusions and Recommendations

4.1 | Policy Implications for Sustainable Growth

Burkina Faso’s growth trajectory remains heavily reliant on primary commodity exports, particularly gold (70% of export earnings) and cotton (15%), rendering the economy susceptible to external demand shocks and price volatility. This dependence underscores the urgency of export diversification. The strategic value-added processing of raw materials (e.g., shea butter, textiles, and processed foods) could enhance resilience, while regional trade agreements (e.g., African Continental Free Trade Area-AfCFTA) must be leveraged to expand market access.

Although agriculture’s GDP contribution was statistically insignificant in the model, it employs 80% of the workforce and

TABLE 5 | Social protection, sustainable environment and political power in the Burkina Faso.

Measure	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change 2014–2023
Health	48.4	48.7	51.0	52.9	52.7	52.8	53.2	54.0	55.6	55.7	+7.3
Education	44.2	45.0	46.9	49.6	49.0	47.5	48.5	49.3	50.1	50.1	+5.9
Social protection and welfare	48.8	48.0	50.6	50.0	51.6	48.2	46.0	41.7	40.4	40.3	−8.5
Sustainable environment	52.1	52.6	52.2	52.2	51.9	51.4	52.8	53.4	52.7	53.7	+1.6
Political power by the social group	72.3	74.6	74.6	72.1	81.9	84.4	84.4	84.4	84.4	78.1	+5.8

Note: Dark grey shade, lowest scores; Light grey shade, highest scores.

Source: The Ibrahim Index of African Governance Data.

TABLE 6 | Economic opportunities, labour opportunities, infrastructures and rural economy in Burkina Faso.

Measure	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Change 2014–2023
Foundations for economic opportunity	50.0	50.9	51.2	51.2	51.7	51.2	50.8	50.3	50.2	50.5	+0.5
Public administration	63.9	64.4	64.1	62.0	60.4	59.0	62.3	64.1	63.1	64.0	+0.1
Business and labour environment	42.8	45.3	44.8	45.6	45.9	45.3	42.3	39.8	38.6	38.6	−4.2
Infrastructure	22.7	23.5	25.2	26.6	29.8	30.8	29.8	29.4	31.3	31.6	+8.9
Rural economy	70.5	70.5	70.5	70.5	70.5	69.6	68.7	67.8	67.8	67.8	−2.7

Note: Dark grey shade, lowest scores; Light grey shade, highest scores.

Source: The Ibrahim Index of African Governance Data.

remains critical for poverty reduction, likely due to informality, low productivity, and multicollinearity with other variables. Rain-fed subsistence farming, post-harvest losses (15%–25%), and inadequate infrastructure (e.g., only 15% of roads are paved) constrain its potential. To transform the sector into an engine of growth.

Burkina Faso must prioritise productivity-enhancing investments, irrigation (only 1% of arable land is irrigated), mechanisation, and climate-smart crops (e.g., drought-resistant varieties). It must also improve value-chain integration by processing cotton and shea nuts to capture higher margins and create jobs and rural infrastructure with storage facilities and transport corridors (e.g., the Abidjan-Lagos agro-corridor) to reduce logistics costs (30%–50% of product value).

The lack of significance of domestic investment and external financial flows (e.g., World Bank loans and ODA) suggests inefficiencies in capital allocation. Key measures must include public investment reform prioritising high-impact infrastructure (energy, transport) to crowd in private capital, aid effectiveness linking ODA to measurable outcomes (e.g., infrastructure quality indices) and enhancing transparency to mitigate leakages and reduce credit constraints for agro-processing firms through targeted lending schemes.

Burkina Faso's path to sustainable development hinges on synergistic policies that bridge agriculture and trade with export diversification, shifting from raw commodities to processed goods to mitigate external shocks, increasing productivity and value addition to harness the sector's latent potential, and more regional integration to reduce trade barriers and expand market access.

While the regression highlights exports' primacy, agriculture's role as the foundation of employment and rural stability cannot be overlooked. Burkina Faso can unlock a virtuous cycle of agro-industrial growth by addressing infrastructure deficits, financing gaps, and skills shortages, potentially doubling agricultural exports within a decade and reducing rural poverty (currently >40%). Future research must further dissect these interdependencies to inform evidence-based policymaking.

This study aligns with our broader research agenda on West African economies, with ongoing work extending this framework to neighbouring countries to identify regional patterns and policy-relevant economic development gradients.

To address the model's limitations, subsequent studies should disaggregate data to isolate sector-specific effects (e.g., mining versus agriculture) and reduce multicollinearity. Employ dynamic models (e.g., VAR or panel cointegration) to assess the long-term relationships between agriculture, trade, and GDP. Institutional variables (governance indices, political stability) are incorporated to evaluate indirect growth pathways.

5 | Conclusions and Recommendations

Burkina Faso has undergone profound changes over the last 25 years, marked by moderate economic progress and persistent

political crises, structural challenges, and widespread insecurity, all of which have hindered development. Achieving sustainable growth will require addressing escalating violence, driven by armed groups and terrorist attacks, which have displaced populations and disrupted economic activity.

The economy remains heavily reliant on agriculture and mining, sectors that are vulnerable to international price volatility and climate shocks. Climate change exacerbates these vulnerabilities, with desertification and erratic rainfall undermining agricultural productivity and threatening food security for much of the population. Further constraints include energy shortages, inadequate basic services, and corruption in public resource management, which stifles policy effectiveness, equitable wealth distribution, and foreign investment. Compounding these issues are low school enrolment rates and a lack of vocational skills, reducing the country's competitiveness. Burkina Faso's growth remains fragile, with mining surpassing agriculture as the primary export driver while dependence on foreign aid persists. Key challenges for the future include economic diversification, agricultural resilience, and improved security to ensure sustainable development (World Bank Group 2023; World Bank 2023a).

In conclusion, the results highlight the fragility of Burkina Faso's economic, political, and social indicators, highlighting the need to strengthen democratic institutions and reduce reliance on agriculture. Economic diversification emerges as a critical priority, along with managing the country's significant dependence on external financing. The analysis further reveals that higher development levels are associated with two key factors: a diminished role of the agricultural sector and increased access to international aid. These findings suggest that sustainable progress will require coordinated efforts to address structural vulnerabilities while leveraging external support for transformative investments.

Based on the evidence presented in our study and the critical analysis of existing literature, it would be necessary to convene urgently a high-level international meeting under the Sahel Alliance framework. This meeting should consolidate strategically aligned donor commitments within a unified regional action plan without requiring donors to cede control over their contributions.

In return, Sahel governments must demonstrate tangible commitments to institutional reforms and accountability measures to ensure the efficacy of international support.

Conflicts of Interest

The authors declare no conflicts of interest.

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