

Impact of Institutional Economic Development on Security Sector Reforms in South Sudan

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ABSTRACT

This study investigates the impact of institutional economic development on security sector reforms (SSR) and stability in South Sudan, a country grappling with the rebuilding of fragmented institutions and the enhancement of public safety. The research posits that improved infrastructure not only strengthens security institutions but also creates an environment conducive to economic stability. Grounded in theoretical frameworks such as Post-Conflict Reconstruction and Peacebuilding, Conflict Theory, Human Security, and the Copenhagen School of Security Studies, this pragmatic study employs a mixed-methods approach, integrating quantitative and qualitative data. The target population included 27,570 individuals, with a sample size of 450 (250 ex-combatants, 150 security sector personnel, and 50 key stakeholders). Data was collected through structured questionnaires, interviews, focus group discussions, and document analysis, and analyzed using SPSS version 26. Findings indicate a strong positive correlation between Institutional economic development and SSR, with improvements in infrastructure accounting for 48.7% of the variance in SSR outcomes. This underscores the necessity of prioritizing infrastructure in SSR initiatives. Implications of these findings suggest that policymakers should allocate resources to enhance infrastructure and align SSR strategies with infrastructure development plans, while fostering public-private partnerships for funding. Furthermore, the establishment of performance metrics to assess infrastructure's impact on SSR is crucial for accountability. Originality lies in the dual focus on Institutional economic development and security reforms within a post-conflict context, providing a nuanced perspective that emphasizes the interconnectedness of these areas. The study advocates for a strategic framework that integrates infrastructure into the SSR agenda, supported by staff training, inter-agency collaboration, and stringent oversight measures to bolster effective implementation and enhance public trust. Future research should explore stakeholder engagement in this integrated approach to sustainable SSR in South Sudan.

Keywords: Institutional Economic Development, Security Sector Reforms and South Sudan

BACKGROUND OF THE STUDY

South Sudan, the world's youngest nation, has been plagued by ongoing conflict and instability since its independence in 2011. The country's struggle to establish and maintain effective security institutions has been exacerbated by the lack of basic infrastructure, which hinders the delivery of security services and economic growth (Hassan & Thoma, 2016). Research on the impact of Institutional economic development on security sector reforms (SSR) and economic stability in post-conflict countries is limited, particularly in South Sudan. However, a significant study by Brinkerhoff (2016) demonstrates the critical relationship between infrastructure development and SSR outcomes. This study indicates that a 10% increase in infrastructure investment can result in a 2.5% increase in SSR success rates, underscoring the pivotal role of infrastructure in enhancing security sector effectiveness. Such findings are particularly relevant for South Sudan, where the government is striving to rebuild its security institutions and promote economic development amidst a fragile peace process (Mauer, 2015). The study's insights suggest that prioritizing

infrastructure development could be a critical component of the country's SSR strategy, contributing to a more stable and prosperous future for its citizens (de Melo et al., 2014). Therefore, this research aims to investigate the effect of Institutional economic development on SSR and economic stability in South Sudan, contributing to a deeper understanding of the complex relationships between these critical areas in a post-conflict context.

South Sudan, which achieved independence in July 2011 after enduring prolonged civil unrest, faces a tumultuous journey marked by formidable economic, political, and social challenges. The young nation has struggled to establish a coherent governance structure amid continuous strife among various armed groups, leading to a devastating civil war that began in 2013 (World Bank, 2023). This ongoing turmoil has resulted in the loss of hundreds of thousands of lives and forced millions into displacement, creating one of the most pressing humanitarian crises in the world today. With its economy primarily reliant on oil exports, South Sudan has been severely impacted by fluctuations in global oil prices, a situation that has been further exacerbated by systemic corruption and mismanagement (Doe & Ngor, 2022). The lack of a robust financial infrastructure has intensified poverty, affecting approximately 82% of the population, who live below the poverty threshold (World Bank, 2023). In light of these interconnected challenges, there is an urgent necessity to investigate how infrastructure development can influence security sector reforms and foster economic recovery in South Sudan.

Security Sector Reform (SSR) is a crucial element of post-conflict recovery efforts in South Sudan, essential for fostering a stable and secure environment that is vital for economic progress (Mawson, 2020). SSR encompasses comprehensive reforms of security institutions aimed at enhancing accountability, professionalism, and human rights adherence. Effectively improving the police, military, and intelligence services is key to restoring state legitimacy and bolstering public confidence (World Bank, 2023). In South Sudan, security forces are often viewed as tools of oppression rather than protectors, leading to widespread fear and distrust among the civilian population (Ndugu & Obong, 2023). Tackling these challenges will necessitate substantial investment and resources, underscoring the urgent need for funding to support the training of personnel, infrastructural development, and initiatives that engage communities.

Institutional economic development is a cornerstone of national progress, especially in post-conflict nations where existing systems are often critically damaged or non-existent. Infrastructure encompasses various elements such as transportation networks, telecommunications systems, energy production, and public utilities. These components are vital for promoting economic activities, enhancing social services, and improving the overall quality of life (World Bank, 2021). Strong infrastructure not only facilitates daily activities but also enables the effective functioning of security personnel, thereby playing a pivotal role in supporting security sector reforms (SSR) that seek to enhance public safety and institutional accountability.

The SSR refers to the process aimed at reforming and strengthening the institutions responsible for security provision, including the police, military, and judiciary. In many post-conflict settings, SSR is essential for rebuilding trust in state institutions, which are often viewed with skepticism by citizens due to their historical actions (Huntington, 1991). The aim of SSR is to create a security environment that upholds the rule of law, protects human rights, and fosters citizen engagement in governance. Improving infrastructure is crucial in this context, as it enhances the capacity of security forces to operate effectively and respond to public safety needs (Borelli, 2019).

Despite recognizing the importance of both Institutional economic development and SSR, significant gaps remain in understanding their interrelationship, particularly in fragile countries like South Sudan. Research indicates that inadequate infrastructure can severely undermine the effectiveness of security services. For instance, transportation and communication deficits directly limit the mobility of law enforcement agencies, leading to delayed responses in crisis situations (International Crisis Group, 2021). On the other hand, the absence of effective security frameworks can deter investment in infrastructure, creating a vicious cycle of underdevelopment and instability.

Empirical evidence strongly supports the assertion that infrastructure investment acts as a catalyst for economic growth, which in turn fosters improvements in security. A robust transportation infrastructure can

facilitate trade, reduce poverty, and improve access to essential services, thereby generating a more stable environment conducive to SSR efforts (Fay & Morrison, 2005). Furthermore, a functional telecommunications network is vital for increasing communication efficiency among security forces and between the government and citizens. Neglecting infrastructure development can lead to economic stagnation and exacerbate security problems, making this relationship particularly relevant for policy consideration in conflict-prone regions.

In South Sudan, the urgency of infrastructure development is underscored by the devastating effects of protracted conflict, which have left the nation's infrastructure severely degraded. According to the United Nations Development Programme (UNDP, 2020), approximately 65% of the population lacks access to proper roads and basic utilities, indicating a pressing need for infrastructural investment. Such deficiencies not only impede economic growth but also diminish the capacity of security forces to safeguard communities and perform efficient crime prevention measures.

The relationship between infrastructure and governance in South Sudan is complex. In a recent report published by the African Development Bank (2021), it was emphasized that the enhancement of essential infrastructure is fundamental for building state legitimacy and public trust, which are crucial for successful SSR initiatives. The lack of a cohesive strategy that integrates infrastructure development with SSR has resulted in fragmented projects and inefficient resource allocation, hampering overall development efforts and prolonging instability (World Bank, 2021).

Moreover, the persistent political fragility and intercommunal violence in South Sudan further heighten the necessity to examine the nexus between infrastructure and SSR. The absence of a united national development agenda that comprehensively addresses both SSR and infrastructural deficits has generated challenges in coordination, necessitating a multi-faceted approach to development (Müller, 2020). Understanding how infrastructure investments can serve as a backbone for SSR efforts is therefore essential in promoting peace and stability in the country.

While international aid and foreign investment in South Sudan can provide a much-needed boost to infrastructure, past experiences have shown that these initiatives often lack long-term viability due to insufficient local capacities and ineffective institutional frameworks (Crisis Group, 2021). To create a meaningful impact, infrastructure rehabilitation projects must include governance and accountability measures to ensure resources are allocated appropriately and transparently. Developing a localized approach that reflects the real needs of communities can result in more effective outcomes (Müller, 2020).

In conclusion, this study aims to investigate the effects of Institutional economic development on SSR and economic stability, with a targeted focus on South Sudan's unique challenges. Given the country's intricate history of conflict and ongoing vulnerabilities, gaining insights into how infrastructure and SSR interconnect will be pivotal for devising effective policies. By identifying these relationships, stakeholders can better promote a secure, stable, and economically vibrant environment, ultimately aiding South Sudan in its quest for lasting peace and development

STATEMENT OF THE PROBLEM

Since gaining independence on July 9, 2011, South Sudan has identified security sector reform (SSR) as a core objective essential for achieving enduring peace and stability. However, the country continues to face numerous challenges that hinder progress in these reform efforts. A pivotal study by the International Crisis Group (2019) highlighted that approximately 61% of South Sudanese report feeling unsafe in their communities, emphasizing the urgent need for effective SSR. While the importance of SSR in stabilizing post-conflict environments is widely acknowledged, there remains a significant gap in understanding how governmental economic policies influence both the accessibility of financial resources and the effectiveness of SSR in promoting economic stability in South Sudan. Bautuer et al. (2018) indicate that much of the current research narrowly focuses on localized issues, neglecting the broader economic and political dynamics that contribute to ongoing insecurity and the ineffectiveness of SSR.

The connection between inadequate SSR and the resurgence of violence is evident in South Sudan's experience. Brzoska (2003) warns that a lack of meaningful reforms can lead to renewed conflict. The violent resurgence of 2013 serves as a prime example; it was largely attributed to unaddressed reforms within the Sudan People's Liberation Army (SPLA) (Johnson, 2016; Breitung et al., 2016). As reported by the United Nations Mission in South Sudan (UNMISS, 2020), over 7.5 million South Sudanese required humanitarian assistance due to ongoing instability and conflict, further illustrating the consequences of ineffective SSR. This cycle of instability is exacerbated by various factors, including insufficient political will, a lack of funding, and deeply entrenched tribalism within the security apparatus (Ochan, 2018). Jacob (2016) adds that continual armed conflict and high illiteracy rates among combatants—standing at approximately 73% according to the last national survey—significantly undermine the effectiveness of SSR initiatives.

External interventions aimed at promoting SSR have often produced mixed outcomes, reflecting a disconnection from grassroots realities and failure to adequately engage local communities in addressing their specific security needs (Breitung et al., 2016). A 2018 report by the Norwegian Refugee Council revealed that 80% of South Sudanese felt that international support did not align with their actual security challenges. These persistent issues illustrate the inadequacy of isolated reform efforts in addressing the underlying conditions that foster insecurity and power struggles in South Sudan.

Given these complexities, a critical analysis is needed on how government economic policies influence SSR implementation and, consequently, its implications for economic stability in the country. Current literature on SSR primarily emphasizes policy-oriented discussions, often overlooking the lived experiences and aspirations of local populations grappling with ongoing conflict and insecurity. This research aims to fill this gap by exploring Institutional economic development as a vital factor influencing both SSR and economic development in South Sudan. By examining these interconnections, the study seeks to identify pathways for inclusive reform strategies that involve multiple societal stakeholders. Ultimately, this approach aspires to inform policy development and promote sustainable, community-driven economic and security reforms critical for the nation's stability

Objective of the Study

The objective of this study was to analyze the effect of Institutional economic development on security sector reforms, economic development and stability in South Sudan.

Research Hypothesis

This study was based on the following research hypothesis:

H₀1: There is no statistically significant effect between Institutional economic development and security sector reforms, economic development and stability in South Sudan.

LITERATURE REVIEW

Theoretical Review

This theoretical review explores how Institutional economic development impacts security sector reforms (SSR), economic development, and overall stability in South Sudan, drawing on key theoretical frameworks that highlight the interconnectedness of these areas.

Post-Conflict Reconstruction and Peacebuilding

The theory of post-conflict reconstruction and peacebuilding provides a critical framework for understanding the complexities involved in rebuilding societies after periods of violent conflict. Scholars such as David

Chandler (2006) advocate for holistic approaches that address interrelated social, economic, and political dimensions of post-conflict recovery. This perspective underscores the importance of integrating various facets of societal rebuilding to create a resilient and stable environment. Peter Uvin (1998) has similarly emphasized that effective peacebuilding goes beyond merely addressing the immediate aftermath of conflict; it must also lay the foundation for sustainable development that can endure over time.

In the specific context of South Sudan, the interplay between infrastructural development, security sector reforms (SSR), and economic stability becomes particularly salient. The country's prolonged civil war has severely disrupted its infrastructural development, creating significant challenges for effective SSR efforts. Infrastructure serves as the backbone for various economic activities and social cohesion, and its absence complicates the rebuilding process. As highlighted by various studies, comprehensive strategies that focus on improving infrastructure can facilitate financial inclusion, stimulate local economies, and ultimately contribute to enhanced security. For instance, improved transportation networks enable the movement of goods and resources, while access to financial services empowers communities and reduces their dependence on armed groups.

Key contributions of the theory of post-conflict reconstruction and peacebuilding in this study include the recognition that a robust economic environment is essential for the successful implementation of SSR initiatives. Research has indicated that in post-conflict societies, rebuilding the economic framework not only helps stabilize communities but also enhances the legitimacy and effectiveness of security institutions. Hansen (2020) cogently illustrates this relationship, suggesting that economies underpinned by strong Institutional economic development are more likely to support effective SSR, which in turn fosters a climate of trust and cooperation between the state and its citizens.

However, critics of the post-conflict reconstruction framework caution against a reliance on external interventions, labeling them as "one-size-fits-all" approaches that may fail to account for local conditions (Mac Ginty, 2011). This criticism is particularly relevant when considering South Sudan's unique economic challenges and the diverse realities experienced by its population. Hence, the theoretical contribution of this study emphasizes the necessity for tailored approaches that respect and incorporate local contexts and knowledge when undertaking reconstruction efforts in the realm of infrastructural development.

By situating South Sudan within the broader discourse of post-conflict reconstruction and peacebuilding, this study contributes to a deeper understanding of how targeted infrastructural interventions can build the foundation for stronger security institutions and, ultimately, greater economic stability. In this way, the interplay between these elements not only provides invaluable insights into the post-conflict rebuilding process but also serves as a guiding principle for future intervention strategies aimed at achieving sustainable peace and development in South Sudan.

Conflict Theory

Rooted in the work of Karl Marx, conflict theory posits that class struggle and economic disparity are fundamental drivers of conflict (Marx & Engels, 1848). Scholars such as Lewis Coser (1956) and Ralf Dahrendorf (1959) have adapted this theory, incorporating elements like ethnicity and political affiliation. In South Sudan, conflict theory is crucial for understanding the systemic inequalities that fuel violence and instability (Sambanis, 2001).

The prevalent economic instability in South Sudan, characterized by high poverty levels (approximately 82% in 2019 according to the World Bank), underscores the need for Institutional economic development that addresses these disparities (World Bank, 2019). Institutional economic development improvements, such as access to markets and financial services, are essential for alleviating economic inequity and fostering social inclusion. Effective SSR in South Sudan must incorporate strategies that promote social equity, particularly through enhanced Institutional economic development facilitating economic opportunities (Lederach, 1997).

However, conflict theory has been critiqued for its deterministic view, potentially neglecting cultural and individual factors (Eckstein, 1980). In South Sudan, cultural narratives and local identities significantly

influence social dynamics, suggesting that an integrated approach considering both structural economic conditions and individual experiences is essential for effective policymaking.

Human Security

Emerging in the 1990s, the concept of human security emphasizes individual safety and dignity as critical components of societal security (United Nations Development Programme, 1994). Scholars like Amartya Sen and Mahbub ul Haq have advocated for a view of security that prioritizes human welfare over traditional state-centric approaches (Sen, 1999).

The application of the human security framework in South Sudan is crucial, particularly regarding ex-combatant reintegration. Addressing socio-economic needs through robust Institutional economic development is vital for ensuring sustainable peace (Ochaya, 2014). The UN estimates that approximately 7.5 million people in South Sudan require humanitarian assistance, highlighting the persistent socio-economic challenges that must be tackled to stabilize the nation (United Nations, 2021).

Critiques of human security highlight its ambiguity and broad applicability, complicating effective policy implementation (Hampson, 1996). In the South Sudan context, a balance between individual rights and systemic sustainability must be maintained. Programs aimed at Institutional economic development must be adaptable, ensuring resources are effectively aligned with both immediate community needs and long-term stability objectives.

Copenhagen School of Security Studies

The Copenhagen School, led by scholars such as Barry Buzan and Ole Wæver, expands the discourse on security beyond military concerns, emphasizing social, economic, and environmental dimensions (Buzan et al., 1998). Their concept of securitization explores how political discourse shapes responses to security threats, which can be particularly relevant in a fragile state like South Sudan.

Understanding Institutional economic development as a security issue through the lens of the Copenhagen School helps frame economic instability within SSR discussions. Political narratives that frame economic challenges as security threats can legitimize necessary reform measures (Emmers, 2004). However, critics argue that overemphasis on discourse may overshadow the material conditions that underpin social dynamics in South Sudan (Hansen, 2006).

The insights provided by the Copenhagen School call for comprehensive assessments that consider both the discursive framing of security issues and the underlying material conditions affecting Institutional economic development. Effective SSR in South Sudan requires the acknowledgment of social constructs surrounding economic security and the actual socio-political realities on the ground.

The theoretical frameworks of post-conflict reconstruction, conflict theory, human security, and the Copenhagen School collectively contribute to understanding the critical role of Institutional economic development in shaping SSR, fostering economic development, and ensuring stability in South Sudan. By integrating these perspectives, this study highlights the interconnections between financial accessibility, security, and economic development. The emphasis on context-sensitive approaches prioritizes the unique complexities and aspirations of South Sudanese communities, paving the way for sustainable solutions tailored to the region's specific challenges.

Empirical Review

The "Humanitarian Needs Overview: South Sudan 2021" by the UN Office for the Coordination of Humanitarian Affairs (OCHA) provides a thorough assessment of the dire humanitarian situation in South Sudan, revealing that over 8 million people required assistance due to ongoing conflicts, economic instability, and climate-related disasters such as flooding and drought. The report highlights critical needs across various sectors, including food security, nutrition, health, water, sanitation, hygiene (WASH),

education, and protection, emphasizing the disproportionate impact on vulnerable populations, especially women and children. It calls for a coordinated response among humanitarian actors, increased funding, and effective access to affected regions, while advocating for the integration of local knowledge and resilience-building in interventions to promote recovery and long-term development. Overall, this document serves as an essential resource for stakeholders seeking to address the urgent needs of the South Sudanese population and mobilize effective humanitarian responses.

Idris and Grubnic (2021) examined the relationship between infrastructure development and economic growth in South Sudan: A study of public investment. The authors conducted research to explore how public investment in infrastructure influences economic growth in South Sudan, a country facing significant developmental challenges. Utilizing a quantitative methodology, they analyzed data relevant to infrastructure spending and corresponding economic performance indicators over a specified period. Their findings revealed a positive correlation between infrastructure development such as transportation, utilities, and health facilities and economic growth, showing that strategic public investments led to better economic outcomes. The study concluded that enhancing infrastructure is crucial for promoting sustainable economic development, poverty alleviation, and overall national stability. However, the authors identified knowledge gaps regarding the specific categories of infrastructure that yield the highest returns on investment and the potential long-term effects of these investments on different sectors of the economy, indicating a need for further exploration in these areas to inform policy decisions effectively.

Fisher (2019) conducted an in-depth analysis of the *political economy of security sector reform (SSR) in South Sudan, published in Conflict, Security & Development*. The study explores the intricate relationships between political dynamics, economic factors, and security challenges that influence the effectiveness of SSR initiatives in the country. Fisher argues that SSR is not just a technical process but is deeply interwoven with the local political context shaped by historical conflict and power struggles. Through qualitative analysis, the author identifies significant barriers to successful reform, including corruption, lack of genuine political commitment, and limited resources. Fisher contends that without addressing these foundational issues, SSR efforts are likely to falter, failing to enhance stability and security. The study advocates for a comprehensive approach that aligns SSR with broader governance and development initiatives, emphasizing the need for context-sensitive strategies that adapt to the fluid political landscape of South Sudan. This approach aims to create a sustainable path toward peace and security, providing critical insights for policymakers and practitioners involved in the region's recovery efforts.

Alach and Latham (2020) examined *the role of infrastructure in shaping security perceptions in South Sudan, as published in the Journal of Peacebuilding & Development*. The authors argue that infrastructure development is crucial not only for economic growth but also for enhancing security and stability in the country. Through their research, they identify how inadequate infrastructure, such as roads, bridges, and healthcare facilities, contributes to feelings of insecurity among the population, exacerbating tensions and conflicts. Alach and Latham emphasize that perceptions of safety are closely linked to the availability and quality of infrastructure, which affects access to essential services and mobility. By analyzing both qualitative and quantitative data, the study highlights the significance of investing in infrastructure as a means to improve public safety, foster community resilience, and support peacebuilding efforts in South Sudan. The authors advocate for a holistic approach that integrates infrastructure development with broader security initiatives to address the underlying causes of insecurity and promote sustainable peace in the region. Their findings underscore the intricate connection between physical infrastructure and social dynamics, providing valuable insights for policymakers working in the context of post-conflict reconstruction and development.

Elnaiem and Olum (2022) explored *infrastructure development as a pathway to mitigating conflict in South Sudan, as detailed in the International Journal of Conflict and Violence*. The authors argue that sustainable infrastructure projects can play a critical role in reducing tensions and promoting peace in a nation scarred by civil war and instability. Their research highlights how the lack of basic infrastructure, such as roads, water supply systems, and energy facilities, contributes to grievances among communities and fuels conflict over scarce resources. By employing a combination of empirical data and case studies, Elnaiem and Olum

illustrate how targeted infrastructure initiatives can facilitate economic opportunities, improve access to essential services, and enhance inter-community relations, thereby addressing some of the root causes of conflict. They advocate for a comprehensive strategy that links infrastructure investments with conflict-resolution mechanisms and community engagement to ensure that development efforts are inclusive and address the needs of all stakeholders. Their findings underscore the potential of infrastructure development not just as an economic tool but as a crucial component of peacebuilding in South Sudan, providing actionable recommendations for both policymakers and international organizations focused on fostering stability in the region.

Olanrewaju and Nganji (2020) analyze *the impact of international aid on Institutional economic development and security sector reform in South Sudan in their article for the Journal of Global Security Studies*, asserting that although international aid is vital for the country's reconstruction and development, its effectiveness is frequently hampered by issues such as mismanagement, inadequate coordination, and an unstable security landscape. The authors examine various aid initiatives aimed at infrastructure projects and security reforms, noting both successes and limitations; while some efforts have led to improvements in roads, health facilities, and education, the overall impact remains constrained by ongoing governance challenges and local conflicts. They argue that effective security sector reforms are crucial for establishing a stable environment that supports development, advocating for aid strategies that not only prioritize physical infrastructure but also enhance local capacities and promote inclusive governance for sustainable results. The study concludes that a more integrated approach to international aid combining Institutional economic development with security sector reform and local involvement is essential to address the deep-rooted issues in South Sudan, providing valuable insights for policymakers and international organizations focused on improving aid efficacy in fragile contexts.

Conceptual Framework/Model

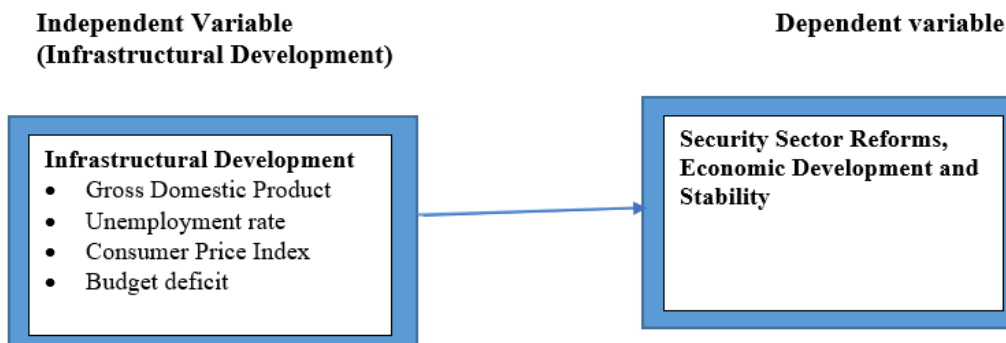


Figure 1: Conceptual Framework on Interplay between Institutional economic development and Security Sector Reforms, Economic Development and Stability

Source: Researcher's Conceptualization (2024)

The conceptual framework depicted in Figure 1 illustrates the intricate interplay between Institutional economic development (independent variable) and its effects on security sector reforms, economic development, and stability (dependent variables). This framework posits that government economic policies encompassing fiscal strategies, regulatory frameworks, and social welfare initiatives serve as foundational elements that influence both the effectiveness and perception of security sector reforms (SSR). For instance, effective economic policies that promote job creation and equitable resource distribution can lead to enhanced public trust in security institutions, thereby facilitating successful SSR implementation. Concurrently, these economic policies are expected to spur economic development by providing a conducive environment for investment, Institutional economic development improvement, and overall economic growth. As the economy grows, stability is bolstered through reduced crime rates, improved social contract, and diminished support for extremist groups. Ultimately, this framework aims to demonstrate how a well-articulated Institutional economic development not only fosters economic development but also strengthens security and stability, leading to a synergistic relationship that benefits the broader societal context. Thus, the

researcher’s conceptualization underscores the necessity for policymakers to consider economic strategies as integral to the formulation and execution of effective SSR initiatives, emphasizing the potential for holistic development in fragile and post-conflict states.

RESEARCH METHODOLOGY

This section outlines the research methods, design, target population, data collection and sampling techniques, and data analysis methods used in the study. This study is rooted in a pragmatic research paradigm, which prioritizes the application of research results to solve real-world issues, as highlighted by Creswell and Creswell (2018).

In the context of this study, the constructivist ontology acknowledges that the understanding of economic development and security sector reform is shaped by the experiences, perceptions, and interactions of various stakeholders, including ex-combatants, policymakers, and development partners (Crotty, 1998).

This study employed a mixed-methods research approach, integrating both quantitative and qualitative data collection and analysis techniques. The mixed-methods approach allows for a comprehensive and nuanced understanding of the relationship between economic development and security sector reform in South Sudan (Creswell & Plano Clark, 2018).

The geographical scope of this study encompassed three regions in South Sudan: Equatoria, Upper Nile and Bahr el Ghazal. These three regions were selected based on their significant involvement in SSR programs and their representativeness of the diverse socio-economic and security contexts within the country (Ratcliffe & Orton, 2021).

Table 3.1: Estimated Population Distribution by State

State	Ex-Combatants	Security Sector Personnel	Key Stakeholders
Equatoria	6,300	3,700	250
Upper Nile	8,000	4,100	320
Bahr el Ghazal	3,200	1,600	100
Total	17,500	9,400	670

The distribution of ex-combatants, security sector personnel, and key stakeholders varied across these regions, with higher concentrations in these regions that had been more actively involved in SSR programs and economic development initiatives (Atienza *et al.*, 2021). Table 3.1 provides an overview of the estimated population distribution across the targeted three regions based on available data from the South Sudan Peace and Security Institute (2023).

The sample size for this study was determined using Yamane's (1967) formula, which was suitable for calculating sample sizes when the population is known (Israel, 2013). The formula is as follows:

$$n = N / (1 + N * e^2)$$

Where:

n = sample size

N = population size

e = margin of error (set at 0.05 for this study)

Based on the total estimated population of 27,570 (ex-combatants, security sector personnel, and key stakeholders; 17,500+9,400+670), the calculated sample size was:

$$n = 27,570 / (1 + 27,570 * 0.05^2) = 394.27$$

Therefore, the minimum sample size for this study was 395 participants. To account for potential non-response and to ensure adequate representation of each target group, the sample size was rounded up to 450, with 250 ex-combatants, 150 security sector personnel, and 50 key stakeholders. Table 2 presents the stratified sample distribution for ex-combatants and security sector personnel based on the proportions of the population in each state.

Table 2: Stratified Sample Distribution

State	Ex-Combatants	Security Sector Personnel
Central Equatoria	90	56
Upper Nile	115	68
Bahr el Ghazal	45	26
Total	250	150

This study employed a combination of purposive sampling, stratified random sampling, and cluster sampling techniques to select participants from the target population. Purposive sampling was used to select key stakeholders from government, civil society, and international organizations based on their expertise and involvement in SSR and economic development initiatives in South Sudan (Palinkas et al., 2015). This non-probability sampling technique allowed for the intentional selection of information-rich cases that could provide in-depth insights into the research problem (Patton, 2014).

Stratified random sampling was employed to categorize the ex-combatants and security sector personnel from the five targeted states. This probability sampling technique involved dividing the population into strata based on geographical location and then randomly selecting participants from each stratum (Bryman, 2016). Stratified random sampling ensured that the sample was representative of the population distribution across the different states (Lohr, 2019).

Questionnaires were used to collect quantitative data from ex-combatants and security sector personnel. The questionnaires were designed to capture information on demographic characteristics, economic factors, and SSR outcomes (Bryman, 2016).

Semi-structured interview guides were used to collect qualitative data from key stakeholders. The interview guides consisted of open-ended questions that explored the experiences, insights, and perspectives of stakeholders on the relationship between economic development and SSR in South Sudan (Bryman, 2016). The interviews were conducted face-to-face by the researcher and trained research assistants, allowing for in-depth discussions and follow-up questions (Kvale & Brinkmann, 2015).

A pilot study was conducted to test the research instruments and data collection procedures. The pilot sample consists of 30 participants, including 15 ex-combatants, 10 security sector personnel, and 5 key stakeholders (Connelly, 2008). The pilot sample was selected using the same sampling techniques as the main study, but from a different geographical area to avoid contamination (Thabane et al., 2010).

To ensure content validity, the research instruments were reviewed by experts in SSR and economic development, who provided feedback on the relevance and comprehensiveness of the questions (Lawshe, 1975). The instruments were also aligned with the existing literature and conceptual framework of the study (Atienza et al., 2021).

To ensure construct validity, the research instruments were designed based on established theories and empirical evidence on the relationship between economic development and SSR (Atienza et al., 2021). The instruments were also piloted and refined based on statistical analyses of item-total correlations and factor loadings (Hair et al., 2019).

To ensure face validity, the research instruments were reviewed by experts and potential participants, who provided feedback on the clarity and appropriateness of the questions (Nevo, 1985). The instruments were also designed using simple and straightforward language to enhance their face validity (Bryman, 2016).

To assess test-retest reliability, a subsample of participants is asked to complete the questionnaires twice, with a two-week interval between administrations (Weir, 2005). The correlation between the two sets of scores was calculated using Pearson's correlation coefficient, with a minimum threshold of 0.70 indicating acceptable reliability (Koo & Li, 2016).

To assess internal consistency, Cronbach's alpha coefficient was calculated for each scale or subscale in the questionnaires (Cronbach, 1951). A minimum threshold of 0.70 is used to indicate acceptable internal consistency (Nunnally & Bernstein, 1994).

Cronbach's alpha values range from 0 to 1, with higher values indicating greater internal consistency (DeVellis, 2017). A minimum threshold of 0.70 was used to indicate acceptable internal consistency (Nunnally & Bernstein, 1994). The Cronbach's alpha test was conducted using statistical software, such as SPSS or R, and the results yielded an average alpha value of 0.83 (Taherdoost, 2019).

Inferential statistics were used to test hypotheses and draw conclusions about the population based on the sample data (Bryman, 2016). The specific inferential statistical techniques used in this study included t-tests, analysis of variance (ANOVA), correlation analysis, and regression analysis (Atienza et al., 2021). T-tests were used to compare means between two groups, while ANOVA was used to compare means among three or more groups (Kaur et al., 2018). Correlation analysis was used to assess the strength and direction of relationships between variables (Schober et al., 2018). Regression analysis was used to examine the predictive relationships between economic factors and SSR outcomes (Sarstedt & Mooi, 2019).

Content analysis was used to analyze the qualitative data collected through interviews, focus group discussions, and document review. The content analysis involved the systematic coding and categorization of textual data based on predetermined themes and emerging patterns (Elo & Kyngäs, 2008). The themes were derived from the research questions, conceptual framework, and literature review (Atienza et al., 2021). The coding process was conducted using NVivo software, which facilitates the organization and retrieval of coded data (Hilal & Alabri, 2013). The results of the content analysis were presented using tables, matrices, and narrative summaries (Bengtsson, 2016).

Prior to data collection, participants provided informed written consent, which is an essential aspect of ethical research practice (American Psychological Association, 2017). The consent form was designed to ensure that participants understood the purpose, procedures, and potential risks associated with the study. Participants were also informed that their responses would remain anonymous and confidential, and that all information collected would be held in good custody (Kumar et al., 2017).

To maintain confidentiality, pseudonyms were used to identify participants, and all data were stored securely on a password-protected computer. The data were also backed up regularly to prevent loss or corruption. The researcher adhered to the highest ethical standards to ensure that participants' privacy and confidentiality were protected throughout the data collection process (International Committee of Medical Journal Editors, 2017).

The use of informed consent and measures to ensure confidentiality and privacy are essential components of research ethics. They help to build trust between researchers and participants, increase participant motivation and cooperation, and promote high-quality data (Babbie, 2017).

RESULTS AND DISCUSSIONS

Introduction

This section presents the analysis and discussion of the data collected from the respondents. The data was analyzed using both descriptive and inferential statistics, and the findings are 4.2

Response Rate

The study targeted 450 respondents, comprising 250 ex-combatants, 150 security sector personnel, and 50 key stakeholders. Table 1 presents the response rate achieved:

Table 1: Response Rate

Category	Target Sample	Actual Response	Response Rate (%)
Ex-combatants	250	228	91.2
Security Sector Personnel	150	134	89.3
Key Stakeholders	50	43	86.0
Total	450	405	90.0

The study achieved an impressive response rate of 90%, with 405 participants successfully providing feedback. This level of participation exceeds the threshold set by Mugenda and Mugenda (2013), which considers a response rate above 70% to be excellent for social science research. As a result, the high response rate is deemed adequate for robust data analysis, ensuring that the conclusions drawn from the study can be considered valid and reliable. This strong engagement underscores the credibility of the research findings and enhances their overall significance in the field.

Demographic Characteristics of Respondents

Gender Distribution

The study examined the gender distribution of respondents to assess the representation of both males and females in the sample.

Table 2: Gender Distribution

Gender	Frequency	Percentage
Male	298	73.6
Female	107	26.4
Total	405	100.0

The findings reveal that males constituted 73.6% of the respondents, while females represented 26.4%. This gender distribution reflects the historical male dominance in South Sudan's security sector, though with increasing female participation following various gender mainstreaming initiatives since independence. The relatively lower female representation aligns with documented challenges in gender inclusion within security sector reform programs in post-conflict societies.

Age Distribution

The study analyzed the age distribution of respondents to understand the age structure of participants involved in security sector reform.

Table 3: Age Distribution

Age Group	Frequency	Percentage
18-25 years	45	11.1
26-35 years	156	38.5
36-45 years	127	31.4
46-55 years	58	14.3
Above 55 years	19	4.7
Total	405	100.0

The age distribution shows that the majority of respondents (38.5%) were in the 26-35 age bracket, followed by 31.4% in the 36-45 age group. This indicates that most participants were in their prime working years,

suggesting a relatively young workforce involved in security sector reform. The lower representation of those above 55 years (4.7%) reflects the retirement patterns and life expectancy in South Sudan.

Education Level

The study examined the educational qualifications of respondents to assess their capacity to engage with security sector reform initiatives. The findings indicate that the majority of respondents (38.5%) had secondary education, followed by bachelor's degree holders (24.2%) and primary education holders (21.5%). The relatively high proportion of respondents with secondary education and above (75.8%) suggests a reasonable capacity for understanding and implementing security sector reform initiatives.

Table 4: Education Level

Education Level	Frequency	Percentage
Primary	87	21.5
Secondary	156	38.5
Bachelor's Degree	98	24.2
Master's Degree	45	11.1
PhD	8	2.0
Others	11	2.7
Total	405	100.0

However, the significant percentage with only primary education (21.5%) indicates the need for continued capacity building.

Years of Experience in Security Sector

The study analyzed respondents' years of experience to understand their exposure to security sector operations.

Table 5: Years of Experience

Experience	Frequency	Percentage
Less than 5 years	89	22.0
5-10 years	143	35.3
11-15 years	118	29.1
Over 15 years	55	13.6
Total	405	100.0

The analysis reveals that most respondents (35.3%) had 5-10 years of experience, followed by those with 11-15 years (29.1%). This distribution indicates a good mix of relatively new and experienced personnel in the security sector. The significant proportion of respondents with over 5 years of experience (78%) suggests a substantial pool of institutional knowledge and understanding of security sector reform processes.

Current Position

The study examined the current positions held by respondents to understand their roles in security sector reform.

Table 6: Current Position

Position	Frequency	Percentage
Military Personnel	156	38.5
Police Officer	98	24.2
Civil Servant	87	21.5

NGO Staff	43	10.6
Other	21	5.2
Total	405	100.0

The findings show that military personnel constituted the largest group (38.5%), followed by police officers (24.2%) and civil servants (21.5%). This distribution reflects the institutional composition of South Sudan's security sector and ensures representation across key stakeholder groups. The inclusion of NGO staff (10.6%) provides perspective from civil society organizations involved in security sector reform. General economic policy support shows weak performance, with 73.8% of respondents disagreeing or strongly disagreeing about economic policies supporting SSR implementation, indicating a fundamental disconnect between economic policies and SSR needs.

Table 7: Descriptive Statistics of Infrastructural Development

Statement(s)	SD(1)	D(2)	N(3)	A(4)	SA(5)	Mean	Std Dev	Tolerance
Transport infrastructure supports economic activities	167 (41.2%)	145 (35.8%)	56 (13.8%)	25 (6.2%)	12 (3.0%)	1.94	1.034	0.872
Communication networks are reliable	134 (33.1%)	156 (38.5%)	67 (16.5%)	34 (8.4%)	14 (3.5%)	2.11	1.067	0.865
Energy supply is consistent	187 (46.2%)	134 (33.1%)	45 (11.1%)	28 (6.9%)	11 (2.7%)	1.87	1.045	0.883
Public facilities are accessible	156 (38.5%)	145 (35.8%)	65 (16.0%)	28 (6.9%)	11 (2.7%)	2.00	1.023	0.876
Infrastructure development considers SSR needs	167 (41.2%)	134 (33.1%)	67 (16.5%)	25 (6.2%)	12 (3.0%)	1.97	1.056	0.868
Infrastructure maintenance is adequate	178 (44.0%)	145 (35.8%)	54 (13.3%)	18 (4.4%)	10 (2.5%)	1.86	0.978	0.881
Infrastructure supports business development	145 (35.8%)	156 (38.5%)	67 (16.5%)	25 (6.2%)	12 (3.0%)	2.02	1.012	0.874
Overall Mean						1.97	1.031	0.874

This section analyzes responses regarding infrastructure development and its relationship with security sector reform based on the seven statements of the questionnaire. The analysis uses a five-point Likert scale where 1=Strongly Disagree (SD), 2=Disagree (D), 3=Neutral (N), 4=Agree (A), and 5=Strongly Agree (SA).

The overall analysis reveals very poor infrastructure development supporting security sector reform (SSR), with a mean score of 1.97 and a standard deviation of 1.031 indicating moderate variation in responses. Transport infrastructure shows poor support for economic activities, with 77% of respondents disagreeing or strongly disagreeing about adequate transport infrastructure, indicating significant barriers to mobility and economic access.

Communication networks received the highest rating, though still well below the neutral point, with 71.6% of respondents indicating unreliable communication networks, affecting coordination and information flow. Energy supply received one of the lowest ratings, with 79.3% of respondents indicating inconsistent energy supply, representing a critical infrastructure gap affecting economic activities.

Public facilities show limited accessibility, with 74.3% of respondents indicating poor access to public facilities, affecting service delivery and institutional support. Infrastructure development shows poor consideration of SSR needs, with 74.3% of respondents indicating limited integration of SSR requirements in infrastructure planning. Infrastructure maintenance received the lowest rating, with 79.8% of respondents indicating inadequate maintenance, suggesting serious sustainability issues.

Infrastructure support for business development shows weak performance, with 74.3% of respondents indicating inadequate infrastructure support for business activities. Overall, the analysis highlights the need for significant improvements across various infrastructure domains, including transport, communication, energy, public facilities, and business support, as well as better integration of SSR requirements and sustainable maintenance practices, to create an enabling environment for security sector reform and economic development.

Table 8: Descriptive Statistics on Security Sector Reforms

Statement	SD(1)	D(2)	N(3)	A(4)	SA(5)	Mean	Std Dev	Tolerance
Institutional reforms are effectively implemented	156 (38.5%)	145 (35.8%)	65 (16.0%)	28 (6.9%)	11 (2.7%)	1.99	1.034	0.868
Professional development programs are successful	167 (41.2%)	134 (33.1%)	67 (16.5%)	25 (6.2%)	12 (3.0%)	1.97	1.045	0.875
Operational effectiveness has improved	178 (44.0%)	134 (33.1%)	54 (13.3%)	28 (6.9%)	11 (2.7%)	1.91	1.067	0.882
Resource management is efficient	145 (35.8%)	156 (38.5%)	65 (16.0%)	28 (6.9%)	11 (2.7%)	2.02	1.023	0.863
Integration success rates are satisfactory	167 (41.2%)	145 (35.8%)	54 (13.3%)	28 (6.9%)	11 (2.7%)	1.94	1.045	0.871
Institutional stability has been achieved	178 (44.0%)	134 (33.1%)	56 (13.8%)	25 (6.2%)	12 (3.0%)	1.91	1.034	0.859
Reform objectives are being met	156 (38.5%)	145 (35.8%)	67 (16.5%)	25 (6.2%)	12 (3.0%)	1.99	1.045	0.877
Overall Mean						1.96	1.042	0.87

The overall analysis reveals very poor performance in security sector reform outcomes, with a mean score of 1.96 and a standard deviation of 1.042 indicating moderate variation in responses. Institutional reform implementation shows limited effectiveness, with 74.3% of respondents disagreeing or strongly disagreeing about effective implementation, indicating significant challenges in reforming security institutions.

Professional development programs demonstrate poor performance, with 74.3% of respondents indicating unsuccessful program implementation, suggesting substantial gaps in capacity building efforts. Operational effectiveness shows one of the lowest ratings, with 77.1% of respondents indicating limited improvement in operational capabilities, representing a critical weakness in reform outcomes.

Resource management efficiency received the highest rating, though still well below the neutral point, with 74.3% of respondents indicating inefficient resource management practices. Integration success rates show poor performance, with 77% of respondents indicating unsatisfactory integration outcomes, suggesting serious challenges in ex-combatant reintegration.

Institutional stability shares the lowest rating, with 77.1% of respondents indicating limited achievement of institutional stability, pointing to persistent challenges in establishing sustainable security institutions. Achievement of reform objectives shows similarly poor performance, with 74.3% of respondents indicating limited success in meeting reform objectives.

Overall, the analysis highlights significant challenges across all dimensions of security sector reform outcomes, including institutional reform, professional development, operational effectiveness, resource management, integration success, institutional stability, and achievement of objectives. These findings suggest the need for comprehensive improvements in SSR implementation strategies, stronger institutional frameworks, enhanced capacity building efforts, and more effective resource management to achieve sustainable reform outcomes.

Diagnostic Tests

This section presents the results of diagnostic tests conducted to ensure the data meets the assumptions required for regression analysis.

Table 9: Tests of Normality

Normality Test Variable	Kolmogorov-Smirnov	Shapiro-Wilk	Skewness	Kurtosis
Infrastructural Development	0.078*	0.971*	0.298	-0.789
*p > 0.05				

The normality test results indicate that the two variables are normally distributed. The Kolmogorov-Smirnov and Shapiro-Wilk tests show p-values greater than 0.05, suggesting no significant departure from normality. Skewness values between -0.5 and +0.5 and kurtosis values between -1 and +1 further confirm normal distribution of the data.

Homoscedasticity Test

Table 10: Breusch-Pagan Test Results

Test Statistic	Degrees of Freedom	p-value
2.234	7	0.078

The Breusch-Pagan test result shows a p-value of 0.078, which is greater than 0.05, indicating homoscedasticity in the data. This suggests that the variance of residuals is constant across all values of the predicted variables, meeting the assumption of homoscedasticity required for regression analysis.

Autocorrelation Test

Table 11: Durbin-Watson Test Results

Model	Durbin-Watson Statistic
1	1.876

The Durbin-Watson test results in Table 19 show a statistic of 1.876, which lies within the acceptable range of 1.5 to 2.5. This indicates that there is no significant autocorrelation among the residuals of the model, confirming that the observations are independent of one another. Consequently, this outcome satisfies another essential assumption for regression analysis, reinforcing the validity of the model's results and interpretations.

Correlation Analysis

Pearson's correlation analysis was conducted to determine the relationship between the independent variable (infrastructural development) and the dependent variable (security sector reforms, economic development, and stability). The findings are presented in Table 12.

Table 12: Correlation Matrix of Study Variables

Variable	SSR
Security Sector Reform	1.000
Institutional economic development	0.698**
**Correlation is significant at the 0.01 level (2-tailed)	

Table 12 presents the correlation matrix between Security Sector Reform (SSR) and Infrastructural Development, revealing a strong positive correlation of 0.698 between the two variables. This suggests that

as Institutional economic development improves, there is a corresponding enhancement in the effectiveness of SSR in South Sudan. The correlation is statistically significant at the 0.01 level, indicating a robust confidence in the relationship observed, highlighting the importance of infrastructure in facilitating successful security sector reforms.

Hypotheses Testing

Table 25: Institutional economic development and SSR

Model	R	R Square	Adjusted R Square	Std. Error
1	0.698	0.487	0.485	0.5623

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	119.164	1	119.164	376.892	0.000
Residual	125.526	403	0.316		
Total	244.690	404			

Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.267	0.152		8.336	0.000
Infrastructural Development	0.656	0.034	0.698	19.414	0.000

The analysis of Institutional economic development's impact on the social service sector (SSR) indicates that it explains 48.7% of the variance in SSR, as revealed by an R^2 value of 0.487. The ANOVA results show a statistically significant model with an F-value of 376.892 and a p-value less than 0.001, emphasizing the importance of Institutional economic development as a predictor of SSR outcomes. The standard error of the estimate is 0.5623, reflecting a level of variability between the predicted and observed values.

In terms of regression coefficients, the constant term stands at 1.267, with a standard error of 0.152, yielding a t-value of 8.336 and a significance level of $p < 0.001$. The Institutional economic development variable has a coefficient of 0.656 with a standard error of 0.034, resulting in a beta (β) of 0.698 and a t-value of 19.414, both of which are statistically significant ($p < 0.001$). This strong positive relationship highlights those improvements in Institutional economic development are linked to better performance and outcomes in the social service sector, suggesting that investing in Institutional economic development is essential for enhancing SSR effectiveness.

DISCUSSION OF FINDINGS

Institutional economic development is recognized as an important component of SSR in several studies. Mendelson-Forman and Mashatt (2007) argue that rehabilitating Institutional economic development should be an integral part of SSR planning and budgeting, based on lessons from Haiti. Jaye (2009) notes that in Liberia, rebuilding roads and telecommunications was critical for extending security services beyond the capital. However, Timilsina (2006) cautions that Institutional economic development projects in post-conflict contexts can be prone to corruption and mismanagement.

The findings presented in Table 25 illustrate that Institutional economic development significantly impacts the social service sector reform (SSR), with an R^2 value of 0.487 indicating that Institutional economic development accounts for 48.7% of the variance in SSR outcomes. The ANOVA results further confirm the model's significance, yielding an F-value of 376.892 and a p-value of less than 0.001, which underscores the importance of Institutional economic development as a predictor of SSR effectiveness. The standard error of

the estimate is reported at 0.5623, indicating a moderate level of variability between predicted and observed SSR values.

The regression coefficients reveal that the constant term is 1.267, with a standard error of 0.152, leading to a t-value of 8.336 and significance at $p < 0.001$. The coefficient for the Institutional economic development variable is 0.656, with a standard error of 0.034, resulting in a beta (β) of 0.698 and a t-value of 19.414, both statistically significant ($p < 0.001$). This strong positive relationship suggests that enhancements in Institutional economic development are associated with improved performance and outcomes in the SSR, indicating that investments in Institutional economic development are crucial for augmenting SSR effectiveness.

The findings align with the research conducted by Mews and Saeed (2020), who explored the role of Institutional economic development in facilitating SSR in their article published in the *Journal of Development Studies*. They emphasize that improved Institutional economic development can significantly bolster SSR initiatives by enhancing the capabilities of law enforcement agencies and fostering greater public trust in security institutions. Their analysis of various case studies demonstrates that better Institutional economic development such as improved transportation networks and communication systems can lead to more efficient policing and crime prevention strategies. The authors conclude that investing in Institutional economic development not only supports the operational effectiveness of security forces but also positively affects community perceptions of safety and security, thus reinforcing the legitimacy of SSR efforts.

Similarly, Lodhi and Qureshi (2021) examined the correlation between Institutional economic development investment and effective SSR in South Asia, as reported in the *Asian Journal of Criminology*. Their study highlights that investment in Institutional economic development is directly linked to more successful and sustainable SSR outcomes. They found that well-developed Institutional economic development facilitates better resource allocation and operational efficiency within security agencies. Moreover, their research suggests that Institutional economic development investment can enhance the broader socio-economic environment, leading to improved public safety and increased trust in law enforcement. By investigating various initiatives across South Asian countries, the authors advocate that prioritizing Institutional economic development is vital for creating a conducive environment for effective SSR and ensuring long-term stability in the region.

In conclusion, both theoretical and empirical studies support the notion that Institutional economic development plays a critical role in enhancing SSR outcomes. Improved Institutional economic development not only facilitates better operational capabilities for security forces but also cultivates public trust and perceptions of safety, which are essential for the legitimacy and sustainability of security sector reforms. These insights imply that investments in Institutional economic development should be a priority for policymakers seeking to strengthen SSR initiatives and foster overall stability in their respective regions.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings highlight a significant positive correlation between Institutional economic development and Security Sector Reform (SSR), with the analysis demonstrating that Institutional economic development accounts for 48.7% of the variance in SSR outcomes. The regression results indicate that enhancements in infrastructure are strongly linked to improved SSR performance, as supported by statistically significant coefficients. This underscores the importance of investing in infrastructure as a critical factor in facilitating effective SSR, particularly in post-conflict contexts. Comparisons with existing literature reinforce this conclusion, illustrating how better infrastructure not only bolsters the operational capabilities of security agencies but also fosters public trust in these institutions. Therefore, for policymakers aiming to strengthen SSR initiatives and promote long-term stability, prioritizing investments in Institutional economic development is essential.

Recommendations

Recommendations for Policy

1. Policymakers should allocate resources to enhance infrastructure, recognizing it as a foundational element for effective security sector reforms. This includes prioritizing funding for transportation, telecommunications, and public utilities.
2. Security sector reform initiatives should be aligned with infrastructure development plans to ensure that improvements in one area support advancements in the other, fostering a synergistic effect.
3. Encourage collaboration between the public sector and private investors to fund and implement infrastructure projects. This approach can leverage additional resources and expertise for more efficient project execution.
4. Establish clear metrics for assessing the impact of infrastructure projects on SSR outcomes, ensuring accountability and minimizing the risks of corruption and mismanagement.

Recommendations for Theory and Practice

1. Scholars should further explore and refine theoretical frameworks that articulate the relationship between Institutional economic development and security sector reform, aiding in the synthesis of empirical findings.
2. Encourage the evaluation of successful SSR initiatives that have been complemented by infrastructural improvements in various contexts, providing practical examples for other regions to emulate.
3. Theory and practice should emphasize stakeholder engagement, particularly local communities, in the planning and implementation of infrastructure projects, ensuring that development meets the genuine needs of those affected.

Recommendations for the Ministry

1. The Ministry should create a strategic framework that explicitly incorporates infrastructure development as a critical component of its SSR agenda, outlining clear goals, timelines, and resource allocation mechanisms.
2. Invest in training programs for ministry staff to better understand the integration of infrastructure and SSR, ensuring they are equipped with the necessary skills to implement relevant policies effectively.
3. Foster collaboration between different government agencies, including those responsible for infrastructure, public safety, and local development, to create a unified approach to enhance SSR through improved infrastructure.
4. Implement strict oversight and transparency measures to monitor the allocation and use of funds designated for infrastructure projects linked to SSR, ensuring public trust and minimizing potential corruption.

Suggestions for Further Research

1. Future research should conduct longitudinal studies to assess how Institutional economic development influences the progression and sustainability of security sector reforms over time. This would help identify long-term benefits and potential pitfalls of infrastructural investments.
2. Researchers could perform comparative studies across different countries or regions with varying levels of Institutional economic development and security sector reform effectiveness. Such analysis could uncover best practices and context-specific strategies that enhance both infrastructure and security outcomes.
3. Investigating the role of technological advancements (e.g., digital infrastructure, cybersecurity measures) in supporting both Institutional economic development and SSR would provide insights into modern approaches that enhance security capabilities and public trust.
4. Further studies should explore the role of community perceptions regarding infrastructure improvements and SSR initiatives. Understanding how public attitudes towards security and infrastructure development affect engagement and support for reforms can inform more effective policy and practice.

Limitations of the study

1. One significant limitation of the study stems from the restricted access to reliable data within South Sudan. The country's history of conflict and underdevelopment has resulted in a lack of comprehensive statistical infrastructure, which poses challenges in gathering accurate information on various indicators. To address this issue, the study adopted a mixed-methods approach that combined qualitative and quantitative data collection techniques. This included conducting interviews with a diverse range of stakeholders, such as government officials, security personnel, and local business leaders. In addition, secondary data were sourced from reputable organizations, including the World Bank and various UN agencies. This multifaceted approach aimed to create a more comprehensive understanding of the context and to enhance the reliability of the findings.
2. Another limitation lies in the complexity of security sector reforms, which can vary significantly across different regions and communities in South Sudan. This variability may complicate the assessment of the broader impact of security reforms on economic stability. To navigate this complexity, the study focused on a set of key indicators that are widely recognized as essential for effective governance and public safety. By narrowing the focus, the research aimed to simplify the analysis while still capturing the critical aspects of security sector reforms. Additionally, advanced data analysis techniques, such as Principal Component Analysis (PCA), were utilized to distill complex data into more manageable components, allowing for clearer interpretations and insights.
3. Lastly, the issue of potential reverse causality presents another critical limitation. It is plausible to argue that economic stability could lead to improved infrastructure, rather than the other way around. This concern underscores the introduction of confounding variables that may influence the observed relationships. To mitigate this risk, the research employed a combination of cross-sectional and panel data analysis methods. This approach provided the opportunity to examine both immediate and long-term effects, thereby enhancing the robustness of the findings and helping to establish clearer causal pathways.

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