

Strategic Framework for India to Enhance its Economic Security in Africa: Trade, Technology, and Geopolitical Considerations

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Abstract

India's economic engagement with Africa has grown significantly in recent decades, positioning the country as a key player in Africa's economic development. This study explores India's strategies for enhancing its economic security in Africa, focusing on trade diplomacy, bilateral agreements, technological collaboration, and investment initiatives. By employing a mixed-methods approach, including document analysis and quantitative data, the study examines India's evolving trade relations, opportunities, and challenges in the African market. The findings reveal that strategic trade alliances, regional integration, and technological collaboration are critical for India to strengthen its economic foothold in Africa. The study underscores the importance of sustainable development practices, risk mitigation strategies, and enhanced diplomatic efforts to optimize India's economic presence. This paper provides policy recommendations to improve India's economic security and maximize its strategic engagement with Africa.

Keywords:

India-Africa trade, economic security, bilateral agreements, technological collaboration, foreign direct investment

Introduction

India's engagement with Africa has evolved significantly over the past few decades, transitioning from historical and cultural ties to a structured economic partnership. This transformation has been driven by Africa's growing significance in global trade, its abundant natural resources, and its ongoing digital transformation. As Africa emerges as a key player in the global economy, India's strategic interests in the continent have expanded, necessitating a robust framework to ensure economic security. This paper aims to develop such a framework by examining India's trade patterns, technological engagements, and geopolitical challenges in Africa. India's relationship

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with Africa dates back centuries, rooted in trade, migration, and cultural exchange. The Indian Ocean served as a vital conduit for this interaction, facilitating the movement of goods, people, and ideas. During the colonial era, both India and Africa were subjected to European domination, which created a shared sense of solidarity in the struggle for independence. Post-independence, India's engagement with Africa was largely driven by its commitment to the Non-Aligned Movement (NAM) and its support for decolonization and anti-apartheid movements (Dubey, 2020). This historical solidarity laid the foundation for contemporary India-Africa relations.

In recent decades, India's engagement with Africa has shifted from a focus on political solidarity to a more structured economic partnership. The launch of the India-Africa Forum Summit (IAFS) in 2008 marked a significant milestone in this transition. The IAFS provided a platform for high-level dialogue and cooperation, leading to the signing of numerous trade agreements and the establishment of joint initiatives in areas such as agriculture, healthcare, and education (Ministry of External Affairs, India, 2023). This shift reflects India's recognition of Africa's growing economic potential and its strategic importance in the global economy.

Africa's significance in the global economy has grown exponentially in recent years. The continent is home to some of the world's fastest-growing economies, with countries such as Ethiopia, Rwanda, and Ghana recording impressive GDP growth rates (World Bank, 2023). Africa's population is also rapidly expanding, with projections indicating that it will account for more than 25% of the global population by 2050 (United Nations, 2022). This demographic dividend presents significant opportunities for economic growth and development. In addition to its demographic potential, Africa is rich in natural resources, including oil, gas, minerals, and arable land. These resources are critical for sustaining global economic growth, particularly in emerging economies such as India. Africa's strategic location, with access to key maritime routes, further enhances its importance in global trade and geopolitics. The continent's ongoing digital transformation, driven by the rapid adoption of mobile technology and internet connectivity, has also created new opportunities for innovation and economic development (GSMA, 2023).

India's strategic interests in Africa are multifaceted, encompassing economic, political, and security dimensions. Economically, Africa represents a significant market for Indian goods and services, as well as a source of critical raw materials. India's trade with Africa has grown steadily over the past two decades, reaching \$89.5 billion in 2022-23 (Ministry of Commerce, India, 2023). Key sectors of engagement include energy, infrastructure, pharmaceuticals, and information technology. Politically, Africa's support is crucial for India's aspirations for global leadership, including its bid for a permanent seat on the United Nations Security Council (UNSC). India has consistently sought to strengthen its diplomatic ties with African countries, leveraging its historical ties and shared developmental goals. The African Union's (AU) endorsement of India's candidacy for the UNSC reflects the strength of this relationship (African Union, 2021).

From a security perspective, Africa's stability is critical for India's economic and strategic interests. The Indian Ocean Region (IOR), which connects India and Africa, is a vital conduit for global trade and energy supplies. Ensuring the security of sea lanes and combating piracy and terrorism in the region are key priorities for India. The growing presence of other global powers, particularly China, in Africa has further heightened the strategic importance of the continent for India.

This study aims to develop a strategic framework for India to enhance its economic security in Africa by analysing trade patterns, investment strategies, technological engagements, and geopolitical risks. It examines the evolution of India-Africa trade relations, key sectors of engagement, and the impact of trade agreements and investment initiatives. Additionally, it explores India's role in Africa's digital transformation, focusing on e-governance, financial inclusion, and renewable energy. The study also assesses geopolitical challenges, including China's growing influence, political instability, and regulatory barriers. To address these concerns, the study proposes strategic recommendations to strengthen trade and investment ties, promote technological collaboration, and mitigate geopolitical and market risks. The key research questions guiding this study include understanding the primary drivers of India's economic engagement with Africa, identifying opportunities and challenges in trade and investment, leveraging India's technological expertise, and developing strategies to manage geopolitical and market risks.

This study is significant for several reasons. First, it contributes to the growing literature on South-South cooperation, particularly in the context of India-Africa relations. Second, it provides actionable insights for policymakers in India and Africa, emphasizing the importance of sustainable development practices and risk mitigation strategies. Third, it highlights the potential for India to play a leading role in Africa's digital transformation, leveraging its expertise in information technology and innovation.

This paper is structured as follows: Section 2 provides a review of the literature on India-Africa economic relations, focusing on trade, investment, and technological collaboration. Section 3 outlines the methodology used in the study, including data collection and analysis techniques. Section 4 presents the findings, focusing on India's trade patterns, technological engagements, and geopolitical challenges in Africa. Section 5 discusses the implications of the findings and proposes a strategic framework for enhancing India's economic security in Africa. Section 6 concludes the paper with policy recommendations and directions for future research.

Literature Review

India-Africa economic relations have been the subject of growing scholarly interest, particularly in the areas of trade expansion, investment trends, and the influence of geopolitical dynamics. Existing literature highlights the historical and contemporary dimensions of economic

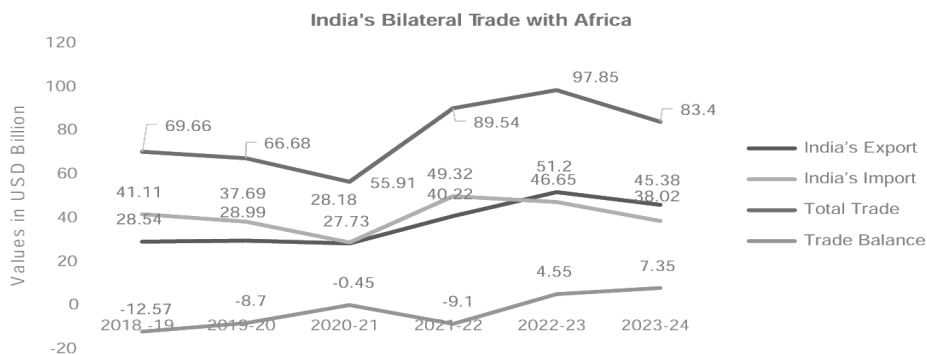
engagements, while also addressing the role of multilateral institutions in shaping bilateral relations. However, gaps persist in the integration of trade, technology, and geopolitics into a comprehensive framework that can enhance India’s economic security in Africa. This review synthesizes key scholarly contributions in these domains, identifying trends, challenges, and opportunities within India-Africa relations.

Trade Growth and Economic Engagements

India’s trade with Africa has grown significantly over the past few decades, driven by mutual economic interests and strategic partnerships (see figure 1). Scholars argue that India’s economic diplomacy in Africa has been shaped by its need for energy resources, raw materials, and new markets for its goods and services (Berhe & Oqubay, 2021). Bilateral trade between India and Africa surpassed \$90 billion in 2022, with India emerging as Africa’s third-largest trading partner after China and the European Union (Mukherjee, 2023). This economic engagement has been facilitated through agreements such as the India-Africa Forum Summit (IAFS) and the Duty-Free Tariff Preference (DFTP) Scheme, which provide market access for African exports (Kumar, 2022).

Figure 1

India Africa Bilateral Trade in USD Billion



Source: Ministry of Commerce & Industry, Government of India (2024)

Moreover, India’s trade relations with Africa have evolved from being largely commodity-based to incorporating diversified sectors such as pharmaceuticals, automobiles, and information technology (Chaturvedi, 2020). According to Tadesse and Brixiová (2019), African countries benefit from India’s expertise in low-cost manufacturing and affordable healthcare solutions. However, scholars note that trade imbalances persist, as African exports to India remain concentrated in primary commodities like crude oil, gold, and agricultural products, while India

exports mainly finished goods (Ancharaz, 2021). Addressing these imbalances requires strategic interventions that promote value addition in African economies.

Investment Trends and Economic Partnerships

Indian investments in Africa have expanded significantly, particularly in sectors such as energy, mining, telecommunications, and infrastructure (Pant, 2021). The Confederation of Indian Industry (CII) reports that India's cumulative foreign direct investment (FDI) in Africa exceeded \$75 billion by 2023, with major investments in Ethiopia, Kenya, Nigeria, and South Africa (Rao, 2023). These investments are largely driven by public-private partnerships and the involvement of Indian multinational corporations such as Tata Group, Bharti Airtel, and Mahindra & Mahindra (Singh, 2020).

Additionally, the role of Indian financial institutions, such as the Export-Import Bank of India (EXIM Bank), has been instrumental in financing development projects in Africa (Mohan, 2022). Through initiatives like the India-Africa Growth Corridor (IAGC), India has sought to enhance economic ties by investing in infrastructure development, capacity building, and technology transfer (Saran & Rajiv, 2021). Despite these positive developments, scholars argue that bureaucratic inefficiencies, regulatory barriers, and political instability in some African nations pose significant challenges to Indian investments (Adebayo & Adeoye, 2023).

The Role of Technology in India-Africa Relations

Technological collaboration has become a key component of India-Africa relations, particularly in areas such as digital infrastructure, financial technology, and renewable energy (Kamal, 2022). India's contribution to Africa's digital transformation is evident in initiatives like the Pan-African e-Network Project, which provides telemedicine and e-education services to several African countries (Sharma, 2021). According to Okonkwo and Adegbite (2023), India's expertise in affordable digital solutions has facilitated financial inclusion in Africa through mobile banking services such as M-Pesa and India's Unified Payments Interface (UPI).

In the renewable energy sector, India has played a critical role in advancing Africa's sustainable development agenda. The International Solar Alliance (ISA), co-founded by India, has been instrumental in promoting solar energy projects across the continent (Bhattacharya & Patel, 2022). Moreover, Indian firms such as Suzlon and Tata Power are investing in wind and solar energy projects in Africa, contributing to the continent's efforts to transition to clean energy (Nyong & Mbogo, 2023). However, challenges such as inadequate infrastructure, limited access to financing, and varying regulatory frameworks hinder deeper technological collaboration (Sithole, 2023).

Geopolitical Challenges and Risks in India-Africa Relations

India's economic engagement in Africa is shaped by geopolitical realities, including China's expanding influence on the continent (Taylor, 2022). Scholars argue that China's Belt and Road

Initiative (BRI) has intensified competition between India and China in Africa, with China providing large-scale infrastructure investments and concessional loans (Jain & Obeng, 2021). According to Bhatia (2023), while India promotes a development partnership model based on mutual benefit, China's dominance in infrastructure projects poses strategic risks for India's economic security.

Additionally, political instability and economic volatility in several African countries create uncertainties for Indian businesses (Adeyemi & Okeke, 2023). Regulatory challenges, corruption, and inconsistent policy frameworks further complicate investment and trade activities (Mukhopadhyay, 2023). Scholars emphasize the need for India to adopt risk mitigation strategies, such as diversifying trade and investment portfolios and strengthening diplomatic engagements to enhance economic security (Ranganathan, 2022).

Addressing Research Gaps and Proposing a Comprehensive Framework

While existing literature provides valuable insights into India-Africa economic relations, there is limited research on a comprehensive framework that integrates trade, technology, and geopolitics to enhance India's economic security in Africa. Most studies focus on isolated aspects, such as trade expansion or geopolitical competition, without examining their interconnected impact on India's strategic positioning (Kumar & Patel, 2023). This paper seeks to bridge this gap by proposing an integrated framework that aligns economic, technological, and geopolitical considerations to strengthen India's engagement with Africa.

In conclusion, the literature on India-Africa economic relations underscores significant growth in trade and investment, the expanding role of technology, and the complexities of geopolitical competition. While India has made substantial progress in strengthening its economic footprint in Africa, challenges such as trade imbalances, investment risks, and regulatory barriers persist. This study contributes to the existing body of knowledge by offering strategic recommendations for India to enhance its economic security in Africa through a holistic approach that integrates trade, technology, and geopolitical considerations.

Methodology

Understanding the complexities of India-Africa economic relations requires a nuanced and multifaceted approach. To capture the intricate dynamics of this relationship, a mixed-methods research design was employed, blending qualitative and quantitative techniques. This approach ensures a comprehensive analysis, combining the depth of qualitative insights with the breadth of quantitative data. The methodology was designed to explore the opportunities, challenges, and evolving trends in India-Africa economic ties, drawing from the perspectives of key stakeholders,

empirical data, and policy frameworks. Below, we delve into the three core components of this research methodology: key informant interviews, surveys, and secondary data analysis.

Key Informant Interviews: Unlocking Expert Insights

The first pillar of this research methodology was the use of Key Informant Interviews (KIIs), a qualitative technique that allowed for in-depth exploration of India-Africa economic relations through the eyes of experts. These interviews were conducted with a carefully selected group of individuals from diverse sectors, including government, business, and academia. The goal was to capture a wide range of perspectives, ensuring that the findings were both holistic and representative of the key stakeholders involved in shaping this relationship. The selection process for key informants was deliberate and strategic. Participants were chosen based on their expertise, experience, and involvement in India-Africa economic activities. Government officials provided insights into policy frameworks and diplomatic efforts, while business leaders shared practical experiences of operating in African markets. Academics contributed theoretical and historical context, enriching the analysis with scholarly perspectives. This triangulation of sources ensured that the research captured the full spectrum of opinions and experiences.

The interviews were semi-structured, allowing for flexibility while ensuring that all critical themes were addressed. Key topics included: (1) The evolution of India-Africa economic relations over the past two decades. (2) The role of government policies and bilateral agreements in fostering trade and investment. (3) The challenges faced by Indian businesses in African markets, such as regulatory hurdles, infrastructure deficits, and cultural differences. (4) The potential for future collaboration in emerging sectors like renewable energy, digital technology, and healthcare.

Table 2

Sample Distribution of Survey Respondents

| Category | Number of Respondents |
|----------------------|-----------------------|
| Government Officials | 10 |
| Business Leaders | 15 |
| Academics | 10 |
| Policy Analysts | 5 |

Source: Author (2025)

Data Collection

Each interview was recorded (with consent) and transcribed for detailed analysis. Thematic analysis was employed to identify recurring patterns, insights, and contradictions across the interviews. This qualitative data provided a rich, narrative understanding of the opportunities and

challenges in India-Africa economic relations, complementing the quantitative data gathered through surveys and secondary sources.

To complement the qualitative insights from key informant interviews (KIIs), a survey was conducted among Indian and African businesses engaged in cross-border trade and investment. The survey aimed to quantify the experiences, perceptions, and expectations of businesses operating at the heart of India-Africa economic relations. By capturing the voices of those directly involved, the research was able to ground its findings in real-world experiences. The survey was designed to be comprehensive yet concise, ensuring a high response rate. It included a mix of closed-ended and open-ended questions, allowing for both quantitative analysis and qualitative insights. Key areas of focus included: The sectors in which businesses operate (e.g., agriculture, manufacturing, services); the scale of their operations in India and Africa; the perceived opportunities in African markets, such as growing consumer demand and resource availability; the challenges faced, including logistical issues, regulatory barriers, and competition; The role of government support and bilateral agreements in facilitating business activities.

The survey was distributed electronically to a targeted sample of businesses, ensuring representation across industries, regions, and company sizes. Follow-up reminders were sent to maximize participation, and the data collected was anonymized to ensure confidentiality.

Data Analysis

The survey data was analysed using statistical software to identify trends, correlations, and outliers. Descriptive statistics provided an overview of the responses, while cross-tabulation and regression analysis explored relationships between variables. For example, the analysis examined whether businesses in certain sectors faced more challenges than others or whether government support had a measurable impact on business success. The open-ended responses were analysed qualitatively, using coding techniques to identify common themes and unique perspectives. This mixed-methods approach to survey analysis ensured that the findings were both statistically robust and contextually rich. The third component of the research methodology was secondary data analysis, which involved the systematic examination of existing data sources related to India-Africa economic relations. This step was crucial for grounding the research in empirical evidence and providing a macro-level perspective on the relationship.

Secondary Data

A wide range of secondary data sources were utilized. This includes information on bilateral trade volumes, commodity composition, and trends over time was obtained from sources such as the World Trade Organisation (WTO), United Nations Comtrade, and national trade databases. Data on foreign direct investment (FDI) flows between India and African countries was sourced from

the Reserve Bank of India (RBI), the African Development Bank (AfDB), and international organisations like the World Bank. Government reports, bilateral agreements, and strategic frameworks were analysed to understand the policy environment shaping India-Africa economic relations. Scholarly articles, books, and working papers provided theoretical insights and historical context.

The secondary data was analysed using both quantitative and qualitative techniques. Trade and investment data were subjected to statistical analysis to identify trends, patterns, and anomalies. For example, the analysis explored whether trade volumes had increased following specific policy interventions or whether certain African countries were emerging as key investment destinations for Indian businesses. Policy documents and academic literature were analysed thematically, focusing on the evolution of India-Africa relations, the role of multilateral forums like the India-Africa Forum Summit (IAFS), and the impact of global economic trends on bilateral ties. This analysis provided a contextual backdrop for the primary data collected through interviews and surveys.

Integration of Methods: A Holistic Perspective

The strength of this research lies in the integration of qualitative and quantitative methods, which allowed for a comprehensive understanding of India-Africa economic relations. The key informant interviews provided depth and nuance, capturing the perspectives of experts and stakeholders. The survey offered breadth, quantifying the experiences and perceptions of businesses. The secondary data analysis provided context, grounding the research in empirical evidence and existing knowledge.

By triangulating these methods, the research was able to address its core questions with rigor and creativity. For example, the qualitative insights from interviews helped explain the quantitative trends observed in the survey and secondary data. Conversely, the statistical analysis of survey and trade data validated and contextualized the narratives emerging from the interviews. Throughout the research process, ethical considerations were paramount. Informed consent was obtained from all interview and survey participants, and their anonymity was preserved. Data was stored securely, and findings were reported transparently, ensuring that the research adhered to the highest ethical standards.

Findings and Discussion

This section presents the key findings of the study, analysing India's economic engagement with Africa through trade, investment, technological collaboration, and geopolitical considerations. The discussion highlights emerging trends, challenges, and opportunities shaping India-Africa relations, drawing insights from key informant interviews, survey data, and secondary sources. It

examines trade dynamics, investment flows, and the role of digital partnerships in strengthening economic ties. Additionally, it explores geopolitical challenges, including competition from China and regulatory barriers, while assessing India’s strategic positioning in Africa. The findings provide a foundation for policy recommendations aimed at enhancing India’s economic security in the region.

Trade Dynamics and Economic Security

India’s trade with Africa has witnessed significant growth over the past two decades, driven by increasing economic engagement and strategic partnerships. However, structural trade imbalances and persistent challenges continue to shape this relationship (see table 3). Insights from key informants and survey respondents shed light on the key export and import sectors, the role of institutional frameworks like the India-Africa Forum Summit (IAFS), and the challenges posed by tariff barriers, logistics constraints, and competition from China.

Table 3

Key Challenges Identified in India-Africa Economic Relations

| Challenge | Percentage of Respondents Affected |
|------------------------|------------------------------------|
| Tariff Barriers | 40% |
| Logistics Constraints | 35% |
| Regulatory Issues | 30% |
| Competition from China | 50% |

Source: Author (2024)

Respondents highlighted that India’s trade with Africa is characterized by a complementary relationship, with India exporting manufactured goods and importing raw materials. Key export sectors include: *Pharmaceuticals*: India is a major supplier of affordable generic medicines to Africa, with respondents noting that this sector has been a cornerstone of India’s trade strategy. One government official stated, “Our pharmaceutical exports have not only boosted trade but also strengthened India’s image as a reliable partner in Africa’s healthcare sector.”

Automobiles and Machinery: Indian automakers and machinery manufacturers have found a growing market in Africa, particularly in countries like South Africa, Nigeria, and Kenya. A business leader remarked, “Africa’s demand for affordable and durable vehicles aligns perfectly with India’s strengths in this sector.” *Petroleum Products*: Refined petroleum products constitute a significant portion of India’s exports to Africa, driven by India’s refining capacity and Africa’s demand for energy.

On the import side, Africa supplies India with critical raw materials, including: *Crude Oil and Natural Gas*: Countries like Nigeria and Angola are key suppliers of crude oil, which is vital for India's energy security. *Minerals and Metals*: Africa's rich reserves of gold, diamonds, and copper are essential for India's manufacturing and jewellery industries.

Table 4

Sectoral Breakdown of India-Africa Trade

| Sector | India's Exports to Africa (%) | India's Imports from Africa (%) |
|------------------------|-------------------------------|---------------------------------|
| Pharmaceuticals | 25% | 5% |
| Automobiles | 18% | 2% |
| Petroleum Products | 22% | 35% |
| Minerals & Metals | 5% | 40% |
| Information Technology | 10% | 1% |
| Others | 20% | 17% |

Source: Author compilation (2024)

However, respondents also pointed out that the trade relationship remains imbalanced, with India's exports far exceeding its imports. One academic expert noted, "While India benefits from Africa's resources, African countries often struggle to access Indian markets for value-added products, perpetuating a structural imbalance."

Role of the India-Africa Forum Summit (IAFS) and Bilateral Trade Agreements

The India-Africa Forum Summit (IAFS) emerged as a critical institutional framework for fostering trade and economic cooperation. Respondents highlighted the role of IAFS in facilitating dialogue, setting strategic priorities, and promoting bilateral trade agreements. A government official explained, "The IAFS has been instrumental in creating a platform for mutual engagement, allowing us to address trade barriers and explore new opportunities."

Bilateral trade agreements, such as the India-SACU (Southern African Customs Union) Preferential Trade Agreement, were also cited as important mechanisms for enhancing trade. However, some respondents expressed concerns about the implementation of these agreements. A business leader noted, "While trade agreements are a step in the right direction, their impact is often limited by bureaucratic hurdles and lack of awareness among businesses."

Challenges: Tariff Barriers, Logistics Constraints, and Competition from China

Despite the growth in trade, respondents identified several challenges that hinder the full potential of India-Africa economic relations:

- i. *Tariff Barriers*: High tariffs and non-tariff barriers in some African countries were cited as a major obstacle. One survey respondent stated, “Tariff barriers make our products less competitive in African markets, limiting our ability to expand.”
- ii. *Logistics Constraints*: Poor infrastructure and inefficient logistics networks in Africa were highlighted as significant challenges. A business leader remarked, “The lack of reliable transportation and storage facilities increases costs and delays, affecting our operations.”
- iii. *Competition from China*: Respondents acknowledged that China’s growing presence in Africa challenges Indian businesses. One academic expert noted, “China’s ability to offer large-scale infrastructure projects and concessional financing gives it a competitive edge over India.”

Technology as a Strategic Enabler

Technological collaboration has emerged as a pivotal element of India’s African economic security strategy. Respondents emphasized the importance of digital partnerships, ICT investments, and sustainable energy collaborations in strengthening India-Africa ties. India’s digital initiatives, such as e-VidyaBharti (tele-education) and e-ArogyaBharti (telemedicine), have been widely praised by respondents. These initiatives leverage India’s expertise in ICT to address critical gaps in education and healthcare in Africa. A government official stated, “Through e-VidyaBharti, we have been able to provide quality education to students in remote areas of Africa, bridging the digital divide.” Similarly, e-ArogyaBharti has enabled Indian doctors to provide teleconsultations and medical training to African healthcare professionals. A survey respondent from the healthcare sector noted, “Telemedicine has been a game-changer, allowing us to reach patients in underserved regions and improve healthcare outcomes.”

India’s investments in Africa’s ICT sector have also been a key driver of technological collaboration. Respondents highlighted the role of Indian companies in expanding internet connectivity, developing digital infrastructure, and promoting e-governance in Africa. A business leader remarked, “Our investments in ICT have not only created business opportunities but also empowered African communities by enhancing access to information and services.” The International Solar Alliance (ISA), co-founded by India, has been a cornerstone of sustainable energy collaborations between India and Africa. Respondents emphasized the importance of solar energy projects in addressing Africa’s energy deficit and promoting sustainable development. One academic expert noted, “The ISA has provided a platform for knowledge sharing and technology transfer, enabling African countries to harness their solar potential.” Indian companies

have also been actively involved in solar energy projects across Africa. A survey respondent from the renewable energy sector stated, “Our solar projects in countries like Rwanda and Senegal have not only contributed to energy security but also created jobs and fostered local capacity building.”

Geopolitical Considerations and Strategic Alliances

Africa’s strategic importance in the global geopolitical landscape has made it a contested space for economic influence among major powers. Respondents provided valuable insights into India’s geopolitical strategy, security concerns, and role in multilateral platforms.

India’s Geopolitical Strategy vis-à-vis China, the U.S., and the European Union

Respondents acknowledged that India faces stiff competition from China, the U.S., and the European Union in Africa. China’s Belt and Road Initiative (BRI) and its extensive infrastructure investments were cited as a major challenge. A government official stated, “China’s ability to offer large-scale projects and concessional financing gives it a significant advantage in Africa.” However, respondents also highlighted India’s unique strengths, such as its historical ties, soft power, and focus on capacity building. One academic expert noted, “India’s approach is more collaborative and people-centric, which resonates well with African countries.”

Security Concerns: Maritime Security in the Indian Ocean Region

Maritime security in the Indian Ocean Region (IOR) emerged as a critical concern for India. Respondents emphasized the importance of securing sea lanes for trade and energy supplies. A government official stated, “The Indian Ocean is a lifeline for our trade with Africa, and ensuring its security is a top priority.” India’s initiatives, such as the SAGAR (Security and Growth for All in the Region) vision, were highlighted as key elements of its maritime strategy. One survey respondent noted, “SAGAR reflects India’s commitment to fostering regional cooperation and addressing security challenges in the IOR.”

India’s Role in Multilateral Platforms: BRICS and AfCFTA

Respondents underscored the importance of multilateral platforms like BRICS (Brazil, Russia, India, China, South Africa) and the African Continental Free Trade Area (AfCFTA) in enhancing India-Africa relations. BRICS provides a platform for India to engage with African countries on issues of mutual interest, such as trade, investment, and sustainable development. One academic expert noted, “BRICS offers a unique opportunity for India to collaborate with African countries on a global stage.” The AfCFTA, which aims to create a single continental market, was also seen as a game-changer for India-Africa trade. A business leader remarked, “The AfCFTA has the

potential to transform Africa's economic landscape, and India must position itself to take advantage of this opportunity.”

The insights from respondents, combined with the mixed-methods research methodology, provide a comprehensive understanding of the trade dynamics, technological collaborations, and geopolitical considerations shaping India-Africa relations. While significant progress has been made, challenges such as structural trade imbalances, logistical constraints, and competition from global powers remain. However, India's focus on digital partnerships, sustainable energy, and multilateral engagement offers a pathway for deepening its economic and strategic ties with Africa. As the global economic and geopolitical landscape continues to evolve, India's ability to leverage its strengths and address its challenges will determine its success in Africa. By adopting a collaborative and inclusive approach, India can not only enhance its economic security but also contribute to Africa's sustainable development, fostering a partnership that is mutually beneficial and enduring.

Conclusion

This study has illuminated the intricate dynamics of India-Africa economic relations by integrating trade, technology, and geopolitical considerations into a comprehensive strategic framework. The mixed-methods approach—combining qualitative insights from key informant interviews, quantitative survey data, and robust secondary data analysis—revealed that while India's engagement in Africa has grown considerably, significant challenges persist. Structural trade imbalances, logistical inefficiencies, regulatory hurdles, and intensifying competition from global players, particularly China, continue to impede the full potential of this partnership.

The policy recommendations outlined herein advocate for a multifaceted strategy that includes expanding and refining trade agreements, bolstering technology transfer and capacity-building initiatives, and strengthening geopolitical alliances alongside security cooperation. These measures are poised to create a more balanced and sustainable trade relationship, spur technological innovation, and enhance India's overall economic security in Africa. By addressing both current challenges and future uncertainties, the proposed framework not only advances our understanding of India-Africa economic interactions but also provides actionable insights for policymakers and stakeholders.

In conclusion, India's pathway toward enhanced economic security in Africa lies in embracing an integrated approach that reconciles economic imperatives with technological and geopolitical realities. Future research should focus on monitoring the long-term impacts of these policy interventions and adapting strategies in response to evolving global economic trends. This study lays a solid foundation for fostering a mutually beneficial and resilient partnership between India

and Africa, thereby contributing to sustainable development and regional stability in a rapidly changing international landscape.

Recommendations

The insights gathered from the mixed-methods research methodology—KIIs, surveys, and secondary data analysis—highlight the immense potential of India-Africa economic relations while also underscoring the challenges that need to be addressed. To strengthen its economic security and deepen its engagement with Africa, India must adopt a strategic and multifaceted approach. Below are three key policy recommendations, supported by insights from respondents and data analysis:

First there is need to expand trade agreements and financing mechanisms. India's trade with Africa has grown significantly, but structural imbalances and barriers continue to limit its full potential. To address these challenges, India should focus on expanding trade agreements and enhancing financing mechanisms that promote equitable and sustainable trade. This means there is need to negotiate comprehensive and inclusive trade agreements. While bilateral and regional trade agreements, such as the India-SACU (Southern African Customs Union) Preferential Trade Agreement, have been instrumental in boosting trade, respondents highlighted the need for more comprehensive and inclusive agreements. These agreements should reduce tariff and non-tariff barriers since high tariffs and non-tariff barriers in some African countries hinder the competitiveness of Indian products. Negotiating agreements that address these barriers will facilitate smoother trade flows.

This study also recommends that value-added exports from Africa need to be promoted so as to address structural trade imbalances, India should encourage African countries to export value-added products by offering preferential market access. A business leader noted, "By enabling African countries to move up the value chain, we can create a more balanced and sustainable trade relationship." Include provisions for Small and Medium Enterprises (SMEs) are also key because SMEs play a crucial role in both Indian and African economies. Trade agreements should therefore include provisions that support SME participation, such as simplified customs procedures and capacity-building programs.

The second recommendation is to enhance financing mechanisms. It is important to note that access to finance is a critical challenge for businesses operating in Africa. Respondents emphasized the need for India to expand its financing mechanisms to support trade and investment. Some of the key recommendations include (1) increasing lines of credit (LoCs). Indeed, India's Lines of Credit to African countries have been a cornerstone of its economic engagement. Expanding these LoCs, particularly for infrastructure and manufacturing projects, will boost trade and investment. A government official stated, "Our Lines of Credit have been well-received, but

we need to scale them up to meet the growing demand.” (2) Establishing a Dedicated India-Africa Trade Fund which can provide financial support to Indian and African businesses, particularly SMEs, to overcome barriers such as high upfront costs and limited access to credit. (3) Promoting Public-Private Partnerships (PPPs) in sectors like infrastructure, energy, and agriculture will leverage private sector expertise and resources while reducing the financial burden on governments.

The third recommendation is to strengthen institutional support. Institutional frameworks like the India-Africa Forum Summit (IAFS) have played a pivotal role in fostering trade and economic cooperation. To build on this success, India should (1) regularize high-level engagements because frequent high-level engagements, including trade delegations and business summits, will help identify new opportunities and address challenges. A survey respondent noted, “Regular interactions between policymakers and businesses are essential for maintaining momentum in India-Africa trade.” (2) Setting up India-Africa Trade Promotion Councils in key African countries will provide on-the-ground support to businesses, helping them navigate regulatory and logistical challenges.

The other recommendation is to increase technology transfer and capacity-building programs. Technology has emerged as a strategic enabler of India-Africa economic relations. To strengthen its economic security, India should focus on increasing technology transfer and capacity-building programs that empower African countries and create long-term partnerships. This can be done by scaling up digital partnership through initiatives, such as e-VidyaBharti (tele-education) and e-ArogyaBharti (telemedicine) which have been widely praised by respondents. To build on this success, India should expand the tele-education and telemedicine programs. By scaling up these initiatives to reach more African countries and regions will address critical gaps in education and healthcare. A government official stated, “Our digital initiatives have the potential to transform lives in Africa, and we must ensure they reach the last mile.” Also investing in digital literacy programs and infrastructure development will enable African countries to fully leverage India’s technological expertise. A business leader remarked, “Digital literacy is the foundation of a knowledge-based economy, and India can play a key role in building this capacity.”

India’s investments in Africa’s ICT sector have been a key driver of technological collaboration. To further strengthen this partnership, support local innovation hubs by establishing innovation hubs and incubators in Africa will foster local entrepreneurship and create a vibrant ecosystem for technology-driven solutions. In addition, promoting E-Governance solutions by sharing India’s expertise in e-governance will help African countries improve public service delivery and transparency. An academic expert noted, “E-governance can be a game-changer for Africa, and India’s experience in this area is invaluable.”

Strengthen Sustainable Energy Collaborations can also be a cornerstone for these relations. Already, the International Solar Alliance (ISA) has been a cornerstone of India-Africa sustainable energy collaborations. To build on this success, there is need to increase investments in solar energy projects. Expanding investments in solar energy projects across Africa will address the continent's energy deficit and promote sustainable development. A survey respondent from the renewable energy sector stated, "Solar energy is a win-win for India and Africa, and we must seize this opportunity." In addition, facilitating technology transfer and capacity building by providing training and technology transfer to African countries will enable them to develop their renewable energy sectors independently. A government official noted, "Capacity building is key to ensuring the sustainability of our energy collaborations."

Another key recommendation is to strengthen geopolitical alliances and security cooperation. Given the continent's strategic importance in the global geopolitical landscape necessitates a robust and proactive approach from India. To strengthen its geopolitical alliances and security cooperation, there is need to deepen strategic partnerships by leveraging on India's historical ties and soft power give it a unique advantage in Africa. This allows India to engage with regional organisations and strengthening ties with institutions like the African Union (AU) and the Economic Community of West African States (ECOWAS) which can enhance India's influence and facilitate coordinated action on issues of mutual interest. In addition, there is need to leverage multilateral platforms like BRICS and the African Continental Free Trade Area (AfCFTA) to provide opportunities for India to collaborate with African countries on a global stage. An academic expert noted, "Multilateral platforms are essential for addressing shared challenges and advancing common goals."

In the same breath, there is need to enhance maritime security cooperation especially maritime security in the Indian Ocean Region (IOR) which is critical for trade and energy security. This can be achieved by expanding naval cooperation through increased joint naval exercises and patrols with African countries will enhance maritime security and combat threats such as piracy and illegal fishing. A government official stated, "Maritime security is a shared responsibility, and India must take the lead in fostering regional cooperation." Furthermore, investment in port infrastructure by developing port infrastructure in key African countries will improve connectivity and facilitate trade. A business leader remarked, "Ports are the gateways to Africa, and India's investments in this area will yield significant dividends."

The policy recommendations outlined above—expanding trade agreements and financing mechanisms, increasing technology transfer and capacity-building programs, and strengthening geopolitical alliances and security cooperation—provide a comprehensive roadmap for enhancing India-Africa economic security. By adopting a strategic and inclusive approach, India can not only address the challenges in its economic relations with Africa but also unlock new opportunities for growth and collaboration. As the global economic and geopolitical landscape continues to evolve,

India's ability to deepen its engagement with Africa will be critical for its economic security and global influence. By leveraging its strengths and addressing its challenges, India can build a partnership with Africa that is mutually beneficial, sustainable, and enduring.

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