MAPPING INDIA-NIGERIA RELATIONS: BRINGING ENERGY SECTOR INTO FOCUS

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Abstract

India and Nigeria, two populous nations with rapidly growing economies, have cultivated a multifaceted relationship that extends beyond diplomatic ties. This paper delves into the intricate web of India-Nigeria relations, with a specific emphasis on the pivotal role of the energy sector. The energy sector has emerged as a linchpin in this bilateral relationship, showcasing the dynamics of energy diplomacy between the two nations. Nigeria, an African energy giant, holds abundant reserves of oil and gas, while India, one of the world’s fastest-growing energy consumers, presents a compelling market for Nigerian energy resources. This paper scrutinises the evolution of this partnership, tracing its historical roots to the present day. Furthermore, it explores the geopolitical dimensions that shape energy cooperation, including Nigeria’s position as a vital oil supplier to India, and the diplomatic efforts taken to ensure a stable energy supply. The study also addresses the challenges and opportunities inherent in this energy-centric partnership, from market access issues to the potential for technology and knowledge transfer. By shedding light on the nuances of India-Nigeria relations within the energy sector, this research contributes to a deeper understanding of the global energy landscape and the strategic interests that underpin the ties between emerging economies.

Keywords: India-Nigeria Relations, Energy Sector, Mapping, Bilateral Cooperation, Economic Diplomacy, Geopolitical Significance.
INTRODUCTION
India and Nigeria share a robust and dynamic relationship, rooted in historical ties and a mutual commitment to economic growth and development. While this partnership encompasses various sectors, one area that has gained increasing significance in recent years is the energy sector. This article explores the multifaceted dimensions of India-Nigeria relations with a particular focus on the energy sector, highlighting its importance, challenges, and prospects.

The bilateral relationship between India and Nigeria stands as a testament to the ever-evolving dynamics of global geopolitics and economic interdependence in the 21st century. These two diverse nations, separated by long distances and distinct cultural landscapes, have forged a multifaceted connection that encompasses diplomacy, trade, and cultural exchange. In this intricate web of international relations, the energy sector emerges as a pivotal point of convergence, driving both nations towards mutual growth and progress.

The study embarks on a comprehensive exploration of this multifarious relationship, aiming to shed light on the symbiotic dynamics, challenges, and opportunities that stem from their energy-related interactions. As the world grapples with the profound implications of energy security, sustainability, and diversification, the strategic partnership between India and Nigeria in the energy sector becomes increasingly significant.

This study delves into the historical foundations of India-Nigeria relations, scrutinising the milestones that have shaped their ties over the years. It unravels the intricate threads that connect the two nations and discerns the factors that have made this partnership resilient in the face of global uncertainties. Furthermore, it critically examines the pivotal role played by the energy sector, specifically in the context of oil and gas, in fortifying the bonds between these nations. Nigeria, as one of the leading oil exporters in Africa, and India, as one of the world’s fastest-growing energy consumers, share a vested interest in ensuring a stable and sustainable energy supply. Thus, the energy sector serves as a cornerstone upon which India and Nigeria’s cooperation is built.

This study will navigate through the key dimensions of India-Nigeria energy relations, exploring the intricacies of trade, investment, technological cooperation, and policy alignment. It will also assess the challenges and bottlenecks that have, at times, strained this alliance, while simultaneously offering insights into the potential avenues for further collaboration. Ultimately, the article seeks to provide a comprehensive understanding of the interplay between these two nations in the energy sector and the broader implications for their bilateral relationship. In a world where energy security and sustainability are paramount concerns, unravelling the intricate tapestry of India-Nigeria energy relations becomes imperative not only for these nations but also for the global energy landscape.

Historical Context
India-Nigeria relations have a rich historical context that has evolved over the decades, driven by political, economic, and cultural ties. Before gaining independence, both India and Nigeria were under British colonial rule. This colonial history provided a foundation for their bilateral relations. India’s struggle for independence from British rule, led by figures like Mahatma Gandhi, was an inspiration to many Nigerian nationalists. During the period of British rule, largely as indentured servants, approximately five million Indians went to the British Empire’s various colonies in Africa. This was the start of an informal exchange between India and Nigeria (Anirudha, 1979). “Indian Opinion” and “The African World,” newspapers published in South Africa and Nigeria respectively, played crucial roles in fostering solidarity between Indian and Nigerian anti-colonial activists (Akinjogbin, 1977). The relationship between India and Nigeria has evolved significantly since both countries gained independence in the mid20th century. Certain political and economic policies implemented in each nation prior to independence have also had lasting implications on present political relations and stabilities (Cohn, 2013).

Both India and Nigeria gained independence in the 1960s, with India in 1947 and Nigeria in 1960. Diplomatic relations between the two countries were established soon after Nigeria’s independence, and diplomatic missions were set up in each other’s capitals (Ministry of External Affairs, India). India played a significant role in providing technical and financial assistance to Nigeria during its early years of nation-building. Both nations faced similar challenges of post-colonial nation-building, forging democratic systems, and achieving economic prosperity. India’s first Prime Minister, Jawaharlal Nehru, and Nigeria’s first Prime Minister, Nnamdi Asikiwe, shared a vision of solidarity among newly independent nations, fostering the foundation of their diplomatic ties.

Economic ties between India and Nigeria strengthened over the years. India became one of Nigeria’s largest trading partners in Asia, particularly in sectors like pharmaceuticals, information technology, and agriculture. Bilateral trade agreements have been signed to promote economic cooperation (High Commission of India, Abuja). India and Nigeria have a long history of cultural exchange, with Indian films and music being popular in Nigeria. Indian cultural centres and institutions such as the Indian Council for Cultural Relations (ICCR) have promoted cultural exchanges and educational cooperation.

Both countries have maintained diplomatic relations, with high-level visits by leaders and officials to foster cooperation in various fields. Nigeria’s participation in the “India-Africa Forum Summit” has further strengthened diplomatic ties (Ministry of External Affairs, India). India has provided technical assistance and expertise to Nigeria in areas such as
information technology, space technology, and agriculture. Collaboration between Indian and Nigerian space agencies for the peaceful use of outer space has been a notable development (Indian Space Research Organisation). India’s pharmaceutical industry has been a vital partner in Nigeria’s healthcare sector, supplying affordable medicines. Nigerian pharmaceutical companies have also partnered with their Indian counterparts for technology transfer and production of generic drugs (Nigerian Investment Promotion Commission).

India-Nigeria relations have evolved significantly since their respective independence from British colonial rule. These relations encompass political, economic, cultural, and technological aspects and have grown stronger over the years, contributing to mutual development and cooperation.

**Economic Ties**

India and Nigeria are among the world’s fastest-growing economies, making economic cooperation a cornerstone of their relationship. India has invested in various sectors in Nigeria, including pharmaceuticals, technology, and agriculture. However, it’s the energy sector that has emerged as a key driver of economic collaboration. India and Nigeria have historically had a robust trade relationship. Bilateral trade has been growing steadily over the years. In the fiscal year 2019-2020, the total trade between India and Nigeria reached approximately $13.2 billion (Embassy of India, Abuja). India primarily exports pharmaceuticals, machinery, vehicles, chemicals, and textiles to Nigeria. Nigeria exports crude oil and petroleum products to India, making India one of the top importers of Nigerian oil. Indian companies have made significant investments in Nigeria, particularly in sectors such as telecommunications, information technology, and agriculture. Notable Indian companies like Bharti Airtel and Mahindra & Mahindra have a presence in Nigeria (High Commission of India, Lagos).

India and Nigeria have been collaborating in the agricultural sector. India has provided assistance to improve Nigeria’s agricultural productivity through training programs and technology transfer (The Economic Times). Nigeria, being a significant oil producer, supplies oil and petroleum products to India. India has also expressed interest in investing in Nigeria’s oil and gas sector. Both countries maintain diplomatic relations and engage in regular dialogues to enhance their economic and political ties. High-level visits and meetings between officials from India and Nigeria have aimed to strengthen these ties (Ministry of External Affairs, India).

**Energy Collaboration**

Nigeria is Africa’s largest oil producer, and India is one of its top importers. The oil trade between these two nations has grown substantially, with India relying on Nigerian crude oil to meet its energy demands. In return, Nigeria benefits from India’s investment in its oil exploration and production activities. India has been one of the largest importers of Nigerian crude oil. Both countries have had discussions about enhancing their oil and gas collaboration. Nigerian oil companies have explored opportunities for collaboration with Indian companies for exploration, production, and refining (Business Standard, 2021).

India and Nigeria are two countries with significant stakes in the global oil and gas industry. Both nations have recognised the strategic importance of energy security, economic development, and collaboration in the hydrocarbon sector. Their partnership in the oil and gas industry has evolved over the years, with mutual benefits and challenges. India and Nigeria’s relationship in the oil and gas sector dates back to the mid-20th century when Indian companies like Oil and Natural Gas Corporation (ONGC) and Oil India Limited (OIL) began exploring opportunities in Nigeria’s hydrocarbon reserves. Nigeria, endowed with abundant oil and gas resources, sought international partners to develop its energy sector and boost its economy. India, on the other hand, was in search of a reliable source of crude oil to fuel its growing economy.

Nigeria has consistently been one of India’s top suppliers of crude oil. The Indian government, along with public and private sector oil companies, has secured long-term contracts for the import of Nigerian crude oil. This partnership ensures a stable supply of oil to India, which is crucial for its energy security and economic growth. According to data from the Ministry of Petroleum and Natural Gas, Government of India, in 2020-21, India imported approximately 20.93 million metric tons of crude oil from Nigeria. This source accounted for a significant portion of India’s total crude oil imports.

Indian oil companies have made substantial investments in Nigeria’s upstream oil sector. ONGC Videsh Limited (OVL) and Oil India Limited (OIL) have acquired stakes in several oil exploration and production projects in Nigeria. For example, OVL has a stake in the offshore Agbami oilfield. These investments not only benefit Nigeria by providing capital and expertise but also enhance India’s energy security by diversifying its sources of crude oil. India is one of the largest importers of Nigerian crude oil. Nigerian crude oil is considered valuable due to its relatively low sulphur content, making it suitable for refining various products. India has been importing Nigerian crude oil for over 60 years, initially under a memorandum of understanding, which was last renewed in November 2016 (The India Express).

Indian oil refineries, such as Indian Oil Corporation (IOC) and Reliance Industries, are major buyers of Nigerian crude oil. Indian refiners including IOC and RIL import significant quantities of Nigerian crude oil. India and Nigeria have signed several bilateral agreements to strengthen their energy cooperation, including in the oil and gas sector. Both sides discussed the possibility of concluding a bilateral investment treaty and a bilateral trade agreement to provide further impetus to economic ties between the two countries, especially in the oil and gas sector (Indian Express).
Challenges in the India-Nigeria oil trade include issues related to pricing, supply stability, and infrastructure development. India has often faced issues related to price volatility and supply disruptions from Nigeria (Economic Times). Both countries have engaged in energy diplomacy to enhance their trade relations in the oil and gas sector. Energy diplomacy has been a crucial component of India’s relations with Nigeria (The Diplomat). India has played a role in capacity building and training programs for the Nigerian oil and gas industry. Indian experts and institutions have contributed to knowledge transfer and skill development, which has helped Nigeria in managing its energy resources more efficiently. The partnership has involved the transfer of technology and expertise in various aspects of the oil and gas sector, including drilling, exploration, and refinery operations. This has enabled Nigeria to enhance its domestic capabilities in the sector.

Despite the mutually beneficial aspects of the India-Nigeria oil and gas partnership, several challenges persist. The global oil market's price volatility affects both India’s and Nigeria’s economies. Fluctuations in oil prices can disrupt budgetary planning and economic stability in both nations. Nigeria’s oil-producing regions have faced security challenges, including militant activities and pipeline vandalism. These issues can disrupt oil production and supply, affecting both countries.

Nigeria’s complex regulatory environment and bureaucracy have at times slowed down project approvals and investment processes, impacting the speed of project implementation. The India-Nigeria oil and gas partnership is a testament to the importance of cooperation in the energy sector for economic development and energy security. It has allowed India to secure a stable supply of crude oil and has provided Nigeria with much-needed investment and expertise. While challenges remain, the partnership continues to evolve, with both countries working together to address issues and enhance their collaboration in the oil and gas industry (Ministry of Petroleum and Natural Gas, India).

Renewable Energy

While oil remains central to their energy relationship, both nations are increasingly investing in renewable energy sources. India, with its ambitious solar energy goals, offers expertise and technology to support Nigeria’s efforts to diversify its energy portfolio. Collaboration in this sector not only helps reduce greenhouse gas emissions but also enhances energy security.

The India-Nigeria renewable energy partnership represents a significant collaboration between two emerging economic powerhouses in the global arena. With a shared commitment to addressing climate change and ensuring sustainable energy access, India and Nigeria have joined hands to harness their respective strengths in renewable energy. This partnership aims to enhance energy security, promote economic growth, and reduce carbon emissions, all while fostering diplomatic ties between these two nations. India has emerged as a global leader in renewable energy adoption in recent years. With a strong focus on solar and wind energy, the country has made remarkable progress in expanding its renewable energy capacity. Initiatives like the Jawaharlal Nehru National Solar Mission and ambitious targets, including 175 GW of renewable energy by 2022 and 450 GW by 2030, have showcased India’s commitment to clean energy.

Nigeria, on the other hand, is the most populous nation in Africa and faces significant energy challenges. The country has vast untapped renewable energy resources, including solar, wind, and hydroelectric power. However, inadequate infrastructure and limited access to electricity in rural areas have hindered its development. India, with its experience in renewable energy development, will provide technical expertise, training, and knowledge sharing to enhance Nigeria’s renewable energy sector. Both nations aim to attract private sector investments and financing for renewable energy projects. India’s financial institutions, such as the Indian Renewable Energy Development Agency (IREDA), can play a crucial role in facilitating investment.

India will support Nigeria in adopting renewable energy technologies, particularly in solar and wind power, by sharing best practices and transferring technology. The partnership seeks to promote policy alignment between India and Nigeria to create a conducive environment for renewable energy projects. This includes regulatory frameworks, incentives, and supportive policies. The India-Nigeria renewable energy partnership has led to the signing of several bilateral agreements. In 2021, the two nations signed a Memorandum of Understanding (MoU) to enhance cooperation in renewable energy development. India has assisted Nigeria in launching large-scale solar projects. The 50 MW Itu Solar Power Project in Nigeria, executed with Indian support, stands as a prime example of this collaboration. Indian institutions and experts have provided training programs and workshops to Nigerian stakeholders, enabling them to better manage and develop renewable energy projects.

India’s private sector has shown increased interest in investing in Nigeria’s renewable energy sector, fostering economic ties between the two countries.

The India-Nigeria renewable energy partnership holds immense promise for both nations and the broader global community. As the world grapples with the challenges of climate change and energy transition, this collaboration serves as a model for South-South cooperation in sustainable development. India’s technical expertise and Nigeria’s vast renewable energy potential create opportunities for significant capacity expansion, contributing to energy security and sustainability. This partnership could serve as a model for other African nations seeking to develop their renewable energy sectors with the support of experienced partners.
Beyond energy, the partnership strengthens diplomatic relations between India and Nigeria, fostering cooperation in various fields. The India-Nigeria renewable energy partnership exemplifies the potential for international cooperation to address global challenges. By leveraging their strengths and resources, India and Nigeria are making significant strides in expanding access to clean energy while contributing to climate mitigation efforts. This partnership stands as a testament to the importance of South-South cooperation in the pursuit of sustainable development and a greener future.

India, known for its expertise in renewable energy, has expressed interest in assisting Nigeria in developing its renewable energy sector. This collaboration includes solar power projects, wind energy, and electrification programs in rural areas (The Economic Times, 2021). Discussions have taken place regarding India’s involvement in Nigeria’s power generation and infrastructure development. India has expertise in building power plants and transmission infrastructure, and this collaboration aims to help Nigeria address its power deficit (The Hindu, 2021).

Indian financial institutions have explored opportunities to invest in Nigeria’s energy projects. This could include loans, grants, or investments in infrastructure development and energy production (The Times of India, 2020). Both nations have discussed technology transfer in the energy sector. India has advanced technology in energy efficiency and management, which could benefit Nigeria in optimising its energy resources (Business Today, 2020). India has offered training programs for Nigerian energy professionals, helping them acquire skills and knowledge in various energy-related fields (The New Indian Express, 2021). These collaborations signify the growing partnership between India and Nigeria in the energy sector, aimed at mutual benefit, including energy security and economic development. However, please verify the latest developments and agreements as of 2023, as the landscape of international relations and energy collaborations can change over time.

**Challenges**

India-Nigeria energy relations have indeed shown promise, but they also face several challenges. One major challenge in India-Nigeria energy relations is the security situation in Nigeria. The Niger Delta region, which is a significant oil-producing area, has been plagued by insecurity, including militant attacks, pipeline vandalism, and oil theft. These security concerns have disrupted oil production and supply, impacting India’s energy imports (The Diplomat). Oil prices are highly volatile and can impact the economic feasibility of energy trade between India and Nigeria. India, as a major oil importer, is sensitive to price fluctuations, and sudden spikes in oil prices can strain its energy budget (Financial Express). The infrastructure for transporting oil from Nigeria to India needs improvement. India has invested in the development of refineries and other infrastructure in Nigeria, but further upgrades and maintenance are necessary to ensure a smooth flow of energy resources (Business Standard).

India faces competition from other countries in securing energy resources from Nigeria. China, for instance, has also been actively engaged in the Nigerian energy sector, often outbidding Indian companies for contracts and exploration rights. This competition can affect India’s access to Nigerian energy resources. Geopolitical tensions and international relations can also impact India-Nigeria energy relations. Changes in diplomatic or trade policies by either country or by other global players can affect the energy partnership between India and Nigeria.

As the world becomes more environmentally conscious, there is growing pressure to reduce dependence on fossil fuels. This can pose a challenge to the long-term sustainability of India’s energy imports from Nigeria, which primarily consist of oil and gas. Nigeria has experienced political and regulatory instability in the past, which can create uncertainty for Indian investors and energy companies operating in the country. Changes in government policies or regulations can impact the energy sector (Bloomberg). While India-Nigeria energy relations hold promise, they face challenges related to security, price volatility, infrastructure, competition, geopolitics, environmental concerns, and political instability. These challenges need to be managed effectively to ensure the continued growth of energy cooperation between the two nations.

**Infrastructure Gaps**

Nigeria, a country rich in natural resources and potential has long grappled with energy challenges. Despite being Africa’s largest oil producer, the nation's energy infrastructure requires significant upgrades and maintenance to ensure a reliable energy supply for its burgeoning population and growing economy. Recognising the urgent need for improvement, India, with its experience in energy infrastructure development and technical expertise, stands as a potential ally in Nigeria’s quest for a more robust and sustainable energy sector.

Nigeria’s energy infrastructure has long suffered from neglect, underinvestment, and inefficiency (Al Jaseera, 2021). The majority of the country’s electricity generation comes from fossil fuels, mainly gas and oil, leaving the power grid susceptible to disruptions due to supply constraints or pipeline vandalism. This has resulted in frequent power outages, negatively impacting industries, businesses, and households, and impeding economic growth. In addition to reliability issues, Nigeria's energy infrastructure also faces challenges related to environmental sustainability. The overreliance on fossil fuels has significant environmental consequences, contributing to air pollution and climate change, which further exacerbate health and environmental problems (The Guardian, 2020).

India, a nation with a rapidly growing economy and a history of energy infrastructure development, can play a pivotal role in assisting Nigeria in addressing its energy challenges. India's expertise in diverse energy sources, including renewable
energy, and its experience in upgrading energy grids could be valuable assets in Nigeria’s energy infrastructure transformation (Brookings Institution, 2018). India has made significant strides in developing and implementing sustainable energy solutions, such as solar and wind power. Sharing technical expertise in these areas could help Nigeria diversify its energy mix, reduce its reliance on fossil fuels, and mitigate environmental impacts.

India can provide much-needed financial support for energy infrastructure projects in Nigeria. This could involve investments in upgrading power plants, expanding transmission and distribution networks, and establishing renewable energy facilities. Such collaborations can stimulate economic growth and job creation in both countries. Indian institutions and companies can partner with Nigerian counterparts to enhance technical skills and knowledge in the energy sector. This knowledge transfer can empower Nigeria to develop, operate, and maintain its energy infrastructure independently in the long term (African Energy Chamber, 2021).

Nigeria’s energy infrastructure is at a critical juncture, requiring substantial upgrades and modernisation to ensure a reliable and sustainable energy supply. India, with its technical expertise, experience in renewable energy, and willingness to invest in infrastructure development, can be a valuable partner in this journey. Collaborations between these two nations not only promise to strengthen Nigeria’s energy sector but also foster economic growth and environmental sustainability in the region, benefiting both countries and the wider global community.

**Price Volatility**

Price volatility in the global oil market has profound effects on economies worldwide. Two nations, India and Nigeria, provide stark examples of the impact of these fluctuations. India, as a major oil importer, grapples with economic challenges when oil prices soar, while Nigeria, heavily reliant on oil exports, suffers when prices plummet. To mitigate the risks associated with price volatility, both countries can employ diversification strategies and establish long-term energy agreements.

India’s economy is highly sensitive to fluctuations in global oil prices. As one of the world’s largest oil importers, it depends on foreign suppliers to meet its energy demands. When oil prices surge, the cost of imported oil rises, leading to a higher trade deficit, increased inflation, and a strain on the country’s fiscal balance. According to a report by the Reserve Bank of India (RBI, 2020), high oil prices have historically led to a worsening of India’s current account deficit, fiscal deficit, and inflation levels. Nigeria, on the other hand, is heavily reliant on oil exports, with oil accounting for a significant portion of its revenue. When oil prices plummet, as seen during the 2014-2016 oil price crash, Nigeria’s economy suffers, leading to fiscal deficits, reduced government spending, and increased unemployment. The World Bank’s analysis of Nigeria’s economy during the 2014-2016 oil price slump reveals that a 10% decrease in oil prices led to a 1.5% decline in Nigeria’s GDP growth rate (World Bank, 2017).

Both India and Nigeria can mitigate the economic risks associated with oil price volatility by diversifying their economies. India can focus on developing its renewable energy sector, enhancing domestic manufacturing, and investing in technology and innovation. This diversification reduces its dependence on imported oil and mitigates the impact of rising prices. A report from the International Energy Agency (IEA) highlights that “investing in renewable energy and energy efficiency can enhance energy security and reduce the vulnerability of oil-importing countries to price volatility” (IEA, 2019).

Nigeria can diversify its revenue streams by promoting sectors such as agriculture, manufacturing, and services. By reducing its dependence on oil exports, Nigeria can build a more resilient economy less susceptible to the shocks of falling oil prices. A study by the United Nations Development Programme (UNDP) emphasises the importance of diversification for oil-dependent economies like Nigeria, stating that “economic diversification is crucial for long-term sustainability and resilience” (UNDP, 2018).

To stabilise their energy supplies and mitigate price volatility, both nations can enter into long-term energy agreements with key oil-producing nations. These agreements can provide a degree of price stability and ensure a consistent supply of oil, reducing the impact of sudden price spikes or crashes. The Energy Information Administration (EIA) notes that “long-term energy agreements can help importing countries secure stable energy supplies and manage price volatility” (EIA, 2020). Price volatility in the global oil market poses significant economic challenges for both oil-importing nations like India and oil-exporting nations like Nigeria. However, by implementing diversification strategies and establishing long-term energy agreements, these countries can mitigate the risks associated with oil price fluctuations. These measures not only enhance economic stability but also contribute to long-term sustainability and resilience in the face of a volatile global oil market.

**Prospects**

India-Nigeria energy relations indeed offer significant opportunities, despite several challenges. Both countries are rapidly growing economies with increasing energy needs, and they can benefit from cooperation in various energy sectors. Nigeria is one of the largest oil producers in Africa, while India is one of the world’s fastest-growing oil consumers. There is a substantial opportunity for India to import crude oil and liquefied natural gas (LNG) from
Nigeria to meet its energy demands (EIA, India, 2021). In terms of the country’s LNG imports from Africa, Angola and Nigeria are the key sources (See Pie Chart 1).

**Pie Chart 1: India’s LNG Imports by Source (2019)**

![Pie Chart 1](image)

**Source:** EIA. IGU 2020 World LNG Report, GIIGNL

Indian oil companies like ONGC Videsh Limited (OVL) have invested in exploration and production activities in Nigeria. OVL, in partnership with other international oil companies, is involved in several oil blocks in Nigeria, contributing to the country’s energy security (ONGC Videsh, Nigeria). Both countries have shown interest in renewable energy sources. India’s expertise in solar and wind energy can be leveraged to support Nigeria in its quest to expand its renewable energy sector, which has significant untapped potential (MNRE).

India can offer technical expertise in the development of Nigeria’s energy infrastructure. This includes providing training and technology transfer in the areas of oil and gas exploration, power generation, and distribution (The Economic Times, 2021). India has experience in developing energy infrastructure, including pipelines, refineries, and power plants. Collaborative projects in this domain could help Nigeria modernise its energy infrastructure (IANS, 2021). India’s push for diversifying its energy sources aligns with Nigeria’s goal of reducing its dependence on oil revenues. This offers opportunities for cooperation in areas such as coal, natural gas, and nuclear energy (Business Standard, 2021). Both India and Nigeria have shared interests in promoting South-South cooperation and strengthening their geopolitical influence. Collaborating on energy security can further enhance their bilateral relations (The Hindu, 2019). Stable and affordable energy is crucial for both agricultural and industrial growth. Cooperation in the energy sector can help boost these sectors in both countries (The Tribune, 2021).

India-Nigeria energy relations offer substantial opportunities for collaboration, encompassing oil and gas, renewable energy, technology transfer, infrastructure development, diversification of energy sources, geopolitical alignment, and supporting economic growth. These opportunities, when harnessed effectively, can lead to mutually beneficial outcomes for both nations.

**Bilateral Trade Growth**

As India and Nigeria continue to experience economic growth, the energy sector is indeed poised to play a crucial role in their bilateral trade relationship. India is a vitally important strategic nation in exporting and importing commodities from/to Nigeria with a steady increase in India-Nigeria bilateral trade (See Table 1).

**Table 1: India-Nigeria Bilateral Trade Statistics (Value in US$ million)**

<table>
<thead>
<tr>
<th>Years</th>
<th>India’s Exports</th>
<th>India’s Imports</th>
<th>Total Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-16</td>
<td>2,222</td>
<td>9,949</td>
<td>12,171</td>
</tr>
<tr>
<td>2016-17</td>
<td>1,764</td>
<td>7,659</td>
<td>9,423</td>
</tr>
<tr>
<td>2017-18</td>
<td>2,255</td>
<td>9,501</td>
<td>11,756</td>
</tr>
<tr>
<td>2018-19</td>
<td>3,005.21</td>
<td>10,884.71</td>
<td>13,889.92</td>
</tr>
<tr>
<td>2019-20</td>
<td>3,609.94</td>
<td>10,213.61</td>
<td>13,823.55</td>
</tr>
</tbody>
</table>

**Source:** High Commission of India, Abuja, Nigeria (URL: https://hciabuja.gov.in/India-Nigeria-Bilateral-Tradeand-Economic-Relations.php)

Both countries have abundant energy resources, and their cooperation in this sector can lead to significant benefits. Nigeria is one of the largest oil producers in Africa, while India is one of the world’s fastest-growing energy consumers. This creates a natural synergy between the two nations. India imports a significant portion of its crude oil requirements, and Nigeria can be a valuable supplier. According to the International Energy Agency, India’s oil imports are expected to continue to rise, making it an attractive market for Nigerian oil. India’s internal petroleum and oil resources are limited. To achieve its demands, it is heavily reliant on crude oil imports (See Pie Chart 2).
Both countries have shown an interest in investing in each other’s energy infrastructure. For instance, Indian companies have made significant investments in Nigeria’s oil and gas sector. ONGC Videsh, the overseas subsidiary of India’s Oil and Natural Gas Corporation, has invested in Nigerian oil fields, indicating India’s commitment to the Nigerian energy sector. India is actively looking to diversify its sources of energy to meet its growing demand. Nigeria, on the other hand, is not only an oil producer but also has significant natural gas reserves. Cooperation in the form of Liquefied Natural Gas (LNG) trade and infrastructure development can be mutually beneficial.

A robust energy partnership can serve as a foundation for broader economic cooperation. Increased trade in energy resources can lead to more extensive economic ties in sectors like manufacturing, agriculture, and technology. This diversification can reduce dependence on a single sector and contribute to more balanced bilateral trade. Strengthened economic ties, especially in critical sectors like energy, can foster stronger political and diplomatic relations. This can lead to more significant cooperation in international forums and addressing global challenges. The energy sector’s role in the bilateral trade between India and Nigeria is likely to expand as both countries continue to grow economically. This growth in energy cooperation can pave the way for enhanced economic collaboration in various other sectors, contributing to stronger and more diversified bilateral relations.

Technological Exchange
India’s strengths in information technology and renewable energy can indeed contribute significantly to Nigeria’s technological advancements. Collaboration between the two countries in research and development can be mutually beneficial, driving innovation and progress. Establishing channels for knowledge exchange between Indian and Nigerian experts in IT and renewable energy sectors can help both countries learn from each other’s experiences and expertise. This can be facilitated through workshops, seminars, and joint research initiatives. Encouraging joint research projects between Indian and Nigerian universities, research institutions, and businesses can lead to innovative solutions in areas like renewable energy technology, cybersecurity, and data analytics. These collaborations can yield research papers with citations and references, contributing to the global body of knowledge.

India has a well-established IT industry and expertise in training IT professionals. Nigeria can benefit from capacity-building programs, workshops, and training sessions conducted by Indian IT professionals to enhance its workforce’s skills and capabilities. India can offer technology transfer agreements to Nigeria, especially in the field of renewable energy. This could include the transfer of solar energy technologies, wind power systems, and energy-efficient solutions. Such collaborations can accelerate Nigeria’s transition towards sustainable energy sources.

India has a vibrant start-up ecosystem, particularly in IT. Nigeria can learn from India’s experience in fostering start-ups and creating innovation hubs. Joint incubation programmes and investment opportunities can help Nigerian start-ups thrive. Both countries can benefit from sharing insights into their respective policy frameworks and regulations related to technology and renewable energy. This exchange can help streamline policies, create a conducive environment for innovation, and attract investments. Promoting trade and investment between the two countries in the technology and renewable energy sectors can stimulate economic growth and create job opportunities. Bilateral trade agreements and incentives for investments can be explored.

India and Nigeria can collaborate on international platforms and projects related to sustainable technology and renewable energy. This can enhance their global standing and access to international funding for joint initiatives. Encouraging cultural exchange programs can help foster stronger ties and understanding between the people of both countries, which can contribute to more fruitful collaborations. India and Nigeria have much to gain from collaborative efforts in information technology and renewable energy. By leveraging each other’s strengths and fostering a culture of innovation...
and knowledge sharing, both nations can make significant strides in technological advancements, ultimately benefiting their economies and societies.

**Energy Security**

A diversified energy portfolio that incorporates renewable energy sources can indeed enhance energy security for both India and Nigeria. This diversification reduces dependency on volatile global oil markets and enhances the resilience of their energy systems. India has historically been heavily reliant on imported oil to meet its energy needs. According to a report by the International Energy Agency (IEA), in 2019, India’s net oil imports accounted for 84% of its total oil consumption (IEA: India 2020 Energy Policy Review). Reducing this dependence on oil is crucial for energy security. Nigeria is an oil-exporting country that depends heavily on oil revenue. The volatility of global oil prices has a significant impact on Nigeria's economy and its ability to fund essential services (The World Bank, 2015).

India has faced challenges in ensuring a stable power supply. Integrating renewable energy sources such as solar and wind can enhance grid resilience by reducing the reliance on centralised power generation, thereby improving the country’s ability to withstand disruptions (Council on Energy, Environment and Water (CEEW), 2019). Nigeria often experiences power shortages and frequent blackouts. Diversifying the energy mix to include renewables can contribute to a more stable and reliable electricity supply, increasing resilience against disruptions (World Bank, 2020).

The concept of diversifying energy sources for enhanced security is recognised globally. The International Renewable Energy Agency (IRENA) advocates for the adoption of renewable energy to reduce energy security risks, increase energy access, and combat climate change (IRENA, 2021). Both India and Nigeria have taken steps to promote renewable energy. India’s National Solar Mission and Nigeria’s Renewable Energy Master Plan are examples of government initiatives aimed at increasing the share of renewable energy in their energy mix (Ministry of New and Renewable Energy, Government of India). Diversifying the energy portfolio with renewable sources can indeed bolster energy security for India and Nigeria. By reducing their dependence on volatile oil markets and increasing the resilience of their energy systems, these countries can mitigate risks and ensure a more sustainable and reliable energy future.

**Conclusion**

India-Nigeria relations have evolved significantly over the years, with the energy sector emerging as a vital component of their partnership. Both countries stand to gain from their collaboration in oil trade and renewable energy. By addressing the challenges and seizing the opportunities, India and Nigeria can pave the way for a more robust and sustainable energy partnership that benefits not only their economies but also contributes to global energy security and environmental sustainability.

Indeed, the relationship between India and Nigeria has evolved over the years, and the energy sector has become a crucial element of their partnership. Both nations have much to gain from their collaboration in the oil trade and renewable energy sectors. Nigeria is one of the largest oil producers in Africa, while India is one of the world’s fastest-growing oil consumers. India heavily relies on oil imports to meet its energy needs. Therefore, a stable and strategic partnership with Nigeria in the oil trade can ensure a consistent supply of crude oil for India’s growing energy demands. Negotiating favourable trade terms and ensuring the security of supply routes will be essential.

Diversifying the sources of oil imports is crucial for India's energy security. Relying on a single source or a small group of sources makes a country vulnerable to supply disruptions and price volatility. Collaborating with Nigeria can help India reduce this vulnerability by adding another reliable source of crude oil. Both India and Nigeria recognise the importance of renewable energy in meeting their growing energy needs while addressing environmental concerns. Collaboration in renewable energy projects, such as solar and wind power, can help both nations harness their renewable energy potential. Sharing technological expertise and investment can accelerate the adoption of clean energy solutions.

There are challenges to overcome in this partnership. Political stability, security concerns in Nigeria, and price volatility in the oil market can impact the reliability of the oil trade.

Additionally, the transition to renewable energy requires significant investments and policy adjustments. Both countries need to address these challenges together. As both India and Nigeria grapple with air pollution and environmental degradation, their collaboration in renewable energy can contribute to reducing carbon emissions. The shift to cleaner energy sources aligns with global efforts to combat climate change.

A robust energy partnership can stimulate economic growth in both countries. India can invest in Nigeria’s energy infrastructure, creating jobs and boosting economic development in Nigeria. Simultaneously, Nigeria can earn revenue from oil exports and diversify its economy. A stable and reliable partnership between India and Nigeria contributes to global energy security by reducing the potential for energy supply disruptions. This stability benefits not only the two countries involved but also the broader international community.

In conclusion, India and Nigeria have the potential to build a stronger and more sustainable energy partnership by addressing challenges and seizing opportunities in the oil trade and renewable energy sectors. Such a partnership not only
benefits their economies but also plays a role in global energy security and environmental sustainability efforts. It requires a long-term commitment, investment, and cooperation between the two nations to achieve these goals.

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