Received: 09.09.2017; Revised: 15.09.2017; Accepted: 25.09.2017

India's Energy Cooperation with Nigeria – Challenges and Prospects

A CASE STUDY

ISSN: 2394-1405 (Print)

ABHISHEK SINGH

Doctoral Fellow International Studies, MMAJ-AIS, Jamia Millia Islamia, New Delhi (India)

ABSTRACT

Energy is an essential input for sustaining and enlarging the economic development of any country. India imports 70 percent of its oil, much from the Middle East because of the stagnated domestic crude production, and its dependence is projected to rise to over 90 percent by 2020. Several events in the past 25 years have led to major supply disruptions from West Asia. With these problems India cannot depend only on West Asia for its energy requirements therefore, Indian policy makers decided to find an alternative source of energy for the long-term interest of India which is dependable in terms of supply without any disruptions for long-term and Africa has become the first choice for India in securing energy as it accounts for 9.7 percent of the world's proven oil reserves, 7.8 per cent of the world's total natural gas, and about 6 percent of the world's proven coal reserves. Nigeria has turned out to be the gateway for India's energy quest in Africa. At present, Nigeria is the largest trading partner of India in Africa. This paper will analyze the factors behind the India's energy cooperation with Nigeria and also throw some light on the challenges and future prospects of energy relationship between India and Africa.

Key Words: Oil, Energy security, Africa, Policy, Cooperation

INTRODUCTION

In the globalization period there are discernible changes that are visible in India – Africa relations and there are new imperatives that are shaping their relationship. It is being shaped by the fundamental changes that took place in both the regions. India's rise as an economic power, its vibrant democracy and its greater integration into the world economy and on African side democratic, economic growth and its continental and regional integrations are major factors that are shaping their relationship. The ability to complement each other is far greater today than it was in the past. There is a desire to work on their complementarities and build partnership based on mutual benefit.¹

As India's appetite for energy grows, concern about how its energy needs are going to be satisfied has been increasing in the country. This concern stems from India's inability to

1. Ruchita Beri (2003), "India's Africa Policy in the Post – Cold War Era: An Assessment", *Strategic Analysis*, vol. 27, no. 2, April – June, p.224

How to cite this Article: Singh, Abhishek (2017). India's Energy Cooperation with Nigeria – Challenges and Prospects. *Internat. J. Appl. Soc. Sci.*, **4** (7 & 8): 373-382.

fulfil the demand for energy from domestic sources, causing Indian companies and officials to look increasingly abroad to meet its requirements. Today, India need to import a large amount of it's major sources of energy (oil and natural gas) from abroad.

Now India is a fastest growing country in the world and for any growing economy, there are so many things require for its development like raw materials, natural resources, energy source and market etc. And India also needs such those things, that's why India looks towards Africa for its needs. The very first thing which India wants from Africa is energy because it is the most essential thing for any country for its development and India has very limited sources of energy and that sources are not enough for India's development requirements. Energy will be the primary focus of India's Africa policy. According to Pham, "India's Africa strategy is based on the quest for resources, business opportunities, diplomatic initiatives and strategic partnerships', which is seen in the emerging trade, investments and developmental assistance relations that Delhi is crafting with African countries."

India's energy security strategy aims to secure stable and increased supplies from various countries. Increased access to supplies is necessary to cope with India's increasing demand and the stability of supplies is important to minimise the effect of price volatility. The more oil prices fluctuate, the harder it is for businesses to create and execute a healthy business plan. Promising business initiatives can be destroyed due to a significant cost increase caused by rising oil prices. This of course has consequences for economic growth. To this end, India is trying to stabilise and secure its current supplies from Nigeria as well as obtaining more access to Nigerian oil and gas reserves.

India's relations with Nigeria, as with the rest of Africa, were initially built upon historical and political connections, but have gradually come to be based more upon economic links.

For a long time Nigeria has been regarded as Africa's giant, with a population of 160 million and significant natural resources. It is ambitious and sees itself as a regional hegemon with the potential to replace South Africa and become the continent's economic powerhouse. Nigeria was rated in the top twelve of emerging market-economies. It is Africa's top oil producer, with a reserve base estimated at 3 billion barrels of crude oil.

The role of Nigeria in Indian energy policy is in principle diversification of suppliers. In 2009, approximately 70% of India's crude oil imports came from the Middle East and reliance on just a few sources is bad in the light of energy security. As such India needs to increase its oil and gas imports from other regions. Turmoil in Iran, for example, can cause disruptions in the supply of oil from that source and the percentage of oil coming from Iran determines the severity of such a disruption for the Indian economy. If a source accountable for 16% (Iran) of imported oil gets disrupted, it is worse than if a source accountable for 8% (Nigeria) gets disrupted. So, if more oil is imported from Nigeria, the severity of oil disruptions from Iran decreases. Of course, the risk of oil disruptions from Nigeria increases, but the risks are spread and mitigated. If India manages to increase supplies from sources other than Middle East, it could increase its energy security by spreading the risks.

Nigerian Oil and Gas Resources:

With a maximum crude oil production capacity of 2.5 million barrels per day, Nigeria

^{2.} Pham, J. Peter (2007), "India's Expanding Relations with Africa and their Implications for U. S. Interest", *American Foreign Policy Interest*, vol. 29, p. 342.

ranks has Africa's largest producer of oil and the sixth largest oil producing country in the world. Nigeria appears to have a greater potential for gas than oil. Nigeria's gas production in the year 2000 was approximately 1,681.66 billion scf, 1,3715 billion scf (standard cubic feet) was associated gas and the rest 310.16 billion was non-associated gas. Nigeria produces only high value, low sulphur content, light crude oils - Antan Blend, Bonny Light, Bonny Medium, Brass Blend, Escravos Light, Forcados Blend, IMA, Odudu Blend, Pennington Light, Qua-Iboe Light and Ukpokiti.³

Including her condensates production, Nigeria's current daily average production is over two million barrels. It has the capacity to up her reserves to 30 billion barrels within the next two years, with its daily production upped to 3mb/d. Indeed, the aspiration of government is to hit the 40 billion barrels mark in reserves by the end of the first decade of the millennium, with a production of about 4mb/d by that target date. As part of the aspiration, the government, through the NNPC, has targeted 2008 as the flare-out date when all gas flaring is expected to stop in all oil and gas fields in Nigeria.

There are 500 fields in the Niger Delta. Over 55 per cent of these are onshore, while the remaining are in the shallow waters (less than 500 metres). Of these fields, 193 are currently producing while 23 have either been closed-down or abandoned.⁴

Nigeria has the second largest oil reserves in Africa after Libya and is the continent's primary oil producer. Nigeria's 37.2 billion barrels of oil reserves also places it among the top 10 countries in terms of reserves on a global basis. The majority of Nigeria's reserves are found along the country's Niger River Delta and offshore in the Bight of Benin, the Gulf of Guinea and the Bight of Bonny. Current exploration activities are mostly focused in the deep and ultra-deep offshore areas with some activities planned in the Chad basin, located in the northeast of the country. Although the Niger Delta remains home to most of the country's oil production at around 60%, the future for expanding oil reserves is likely to be in deep offshore fields. Nigeria's present oil production capacity is around 3.23 million bpd, but in reality, the country only produces around 2.5 million bpd.

India's energy security strategy towards Nigeria has two objectives. First, to increase Indian access to Nigerian oil and gas reserves and second, to secure a stable flow of energy supplies from Nigeria to India. This research analyses the factors that determine the success of India's energy security strategy towards Nigeria based on these two objectives.

In the past two decades, the proven oil and gas reserves in Nigeria have increased significantly. The proven oil reserves were estimated at 16 billion barrels in 1990, 29 billion barrels in 2000 and 37.2 billion barrels at the end of 2010 (Table 1). The proved Nigerian oil reserves have thus increased by 132.5% between 1990 and 2010.

Table 1 : Development of proved oil reserves of Nigeria and India 1990-2010					
Thousand million barrels	1990	2000	2010	Share of total	R/P ratio
Nigeria	17.1	29.0	37.2	2.7%	42.4
India	5.6	5.3	9.0	0.7%	30.0
Total world	1003.2	1104.9	1383.2	100.0%	46.2

Source: Based on British Petroleum, BP Statistical Review of world energy, June 2011, P.6

4. Ibid.

http://www.nnpcgroup.com/nnpcbusiness/upstreamventures/oilproduction.aspx accessed on 18th April, 2016.

Why India needs Nigerian Oil?:

To date, India has developed a cluster of energy policies rather than an overarching energy strategy. Ideology, politics, and processes have complicated the country's quest for energy. Attempts at integrating energy policies have been hindered by separate entities overseeing each type of energy source, as well as by stove-piped policy-making on related issues of foreign affairs, economics, and the environment. And the realities of domestic politics and socioeconomic concerns have curbed policymakers' willingness to make tough, yet necessary, choices.

Now at a critical juncture, India's policymakers are increasingly aware of the need for an effective and diversified energy strategy—or at least an integrated set of policies to balance foreign policy, economic, environmental, and social issues with the rising demand for energy. While there is little consensus over how best to proceed, there is no doubt that India's need for oil and other forms of energy will continue to grow. Meeting this need will have a decisive impact on the country's actions not just in the energy sector, but in its efforts to achieve its broader strategic goals at home and abroad.

With a very limited production and reserves of oil and the harsh situation in West Asian region, India has developed multiple policies regarding securing energy resources instead of an overarching energy strategy. At this crucial stage, Indian policymakers now being aware of the need for an cost-effective and diversified energy strategy—or at least to develop a set of some integrated set of policies to balance its energy requirements with the increasing demand for energy.

Nigeria has turned out to be the most successful investment of India in terms of its energy needs. India's historical relationship with the region is crucial in securing energy resources from the country. Nigeria, with having the largest oil reserves in Africa and with standing at 6th position in the world has became India's largest trading partner in the continent. Being a late comer in the oil play in Nigerian region, India had successfully gained the control in the region with a few factors which are working in its favour. First, the strong and deep diplomatic relationship with the country; Second, Nigeria continues to be India's biggest trading partner in the continent; and Third, presence of a number of Indian private sector companies in the country.

In November 2005, after another round of meetings with the Nigerians, Subir Raha, the chairman of ONGC, revealed in an interview that, "OMEL had signed a memorandum of understanding (MoU) with the Nigerian government for a \$6 billion oil-for-infrastructure deal." The essence of the MoU is sourcing of 450,000 bpd of equity oil over 25 years. On its part, India was to assist Nigeria in the establishment of a 2,000 mw thermal power plant, a refinery and upgrade its railway infrastructure. The Nigerian government offered two blocks to OMEL. However, under the agreement, the investment was expected to be proportional to the scale of oil discoveries. The power project in Nigeria would be a coal fired independent power producer while the railway was to link the southern oil city of Port

See http://www.hicomindlagos.com/docs/Nigeria-Fact-Sheet.htm. See also 'ONGC Mittal Energy Signs MoU with Nigeria', The Hindu, 12 November 2005, at http://www.thehindu businessline.com/ 2005/11/12/stories/2005111202620300.htm, accessed on 23.11.2015.

Harcourt to Kano, 1,000 km (625 miles) to the north. In the 2006 round OMEL was successful and in May 2006 was awarded two blocks—OPL 275 and OPL 289. In the 2007 licensing round held two weeks before the change of presidency, Nigeria had offered 45 exploration blocks, to which no Indian company except Essar responded. Essar Energy Holdings Ltd, a unit of Essar Global, bagged a shallow water offshore exploration Block 226 with reserves of up to 80 million barrels.

India's investment in Nigeria:

Indian companies are queuing up to get their share in the energy sector of Africa. Starting life as a small directorate in the government of India's Ministry of Natural Resource and Scientific Research in 1955, ONGC has aggressively sought stakes for exploration of oil and also involve in various development activities across the continent. ONGC alone holds the exploration rights for more than half of the hydrocarbon acreage licensed out by the Indian government.⁸

ONGC Videsh Ltd is the largest Indian multinational owned by ONGC, whose market capitalisation net worth is 30 billion US\$ and net profit are to extent of 3 billion US dollars. ONGC Videsh ltd has been co-operating with several oil companies in exploring oil and gas in Libya, Sudan, Ivory Coast, Egypt, Nigeria and Angola under different terms & conditions. In Africa, OVL is co-operating with china National Petroleum Corporation, Sudan National Oil Company, Egyptian General Petroleum Corporation, Vanco Energy Company USA, Mittal Investment Sarl of Mittal Steel, Oil India Limited, Angola B. V. Subsidiary of Shell. OVL has 34 oil and gas projects in 15 countries all over the world including Africa.

In 2005, ONGC has tied up with Arcelor Mittal and formed a new entity named ONGC Mittal Energy Ltd. (OMEL). Further, a report shows that OMEL, agreed to sign to a \$ 6 billion infrastructure deal with Nigeria in exchange for extensive access to some of the best production blocks in West African countries.

In January 2006, Chinese and Indian NOCs, including OVL, agreed to bid jointly for stakes in companies and blocks as part of a larger set of co-operative energy agreements signed by their governments. OVL has also signed a Memorandum of Understanding with the Japanese agency JOGNEC, with the intention that OVL and Japanese companies will jointly bid on assets in Libya. ONGC also involved in discussions with companies like Chevron, Total and Royal, Dutch Shell regarding swapping stakes in oil blocks.⁹

Present figures of India's oil import from Nigeria:

India's import of Nigeria crude oil is projected to grow by 26 per cent to reach 116.8 million barrels in 2014 all things being equal as shown by Business Day Research and Intelligent

^{6. &#}x27;ONGC Mittal Energy Signs MoU with Nigeria', no. 48.

^{7. &#}x27;Essar Wins Oil Block', The Tribune, 17 May 2007, at http://www.tribuneindia.com/2007/20070519/biz.htm#2, accessed on 15.11.2015.

^{8. *} Ministry of Petroleum and Natural Gas, "Annual Report 2006-07", p. 157.

^{9.} Sanjay Dutta, "OVL, Japan agency eye S-E Asia fields", The Times of India, June 12, 2007.

Unit (BRIU) in their current edition of Nigerian Oil and Gas Industry Report yet to be released to the public.

According to 2013 World Oil Outlook report, India's demand for crude oil is expected to grow by 3% from 3.8 million bpd in 2013 to 3.9 mbpd in 2014, with Nigeria accounting for 8.2 per cent of India's import in 2014, this is equivalent to 0.32 mbpd or 116.8 million barrel for the year under review.¹⁰

We expect that when the last quarter report for 2013 is released India's import figure should be as high as 92.49 million barrels. This implies that India import from Nigeria will increase by 26 per cent to 116.8 million barrels by 2014 all other factors remaining constant. BRIU calculations show that Nigeria's share of India import will increase from 8 per cent in 2014 and 2015 to 10% in 2016. 11

Prospects of India's Energy Cooperation with Nigeria:

Since 1990s India and Africa has developed very strong relationship in political, diplomatic, socio-economical and other sectors. This relationship now needs to be strengthened more in a time of energy crisis in the world. All developing countries with their booming economy and industries are in a need for regular supply of energy resources for the sake of their development for which they are venturing into foreign markets and making investments in the oil and gas fields across continent. India with its growing economy and very few supplies of energy resources within the country has to rely on the import of energy resources from the West Asia, Africa and many other regions across the world. With all the disruptions activities going on in West Asia since 1980s, India cannot wait for the problems to be settled in the region. Growing economy need a continuous supply of energy resources at any cost from anywhere. And with a vast reserves of oil and natural gas along with many unexplored areas of potential oil fields, Africa become the first choice for India in finding another supplier of energy resources to it. Further, being the largest trading partner of India since many years and the largest oil producer in the African continent, Nigeria has become the first choice for India which was further joined by Sudan.

Energy relationship of India with Nigeria in the energy sector has been the centre among many other aspects. Through this relationship, not only India is benefitting but side by side Nigeria is also getting benefitted from this relationship. This relationship or cooperation works in both ways. India is getting what it needed for its industries and regular needs which is fuelling India's development needs. And on the other hand, Nigeria is getting the infrastructure for their refineries and oil fields as they are not having enough appropriate equipment for the oil exploration and production. India is providing the tools and machinery for the extraction of oil and gas from the fields which is great help for Nigeria. Apart from this, India is involve in various other activities in Nigeria such as building infrastructure, providing them world class education, skill training under ITEC Programme of India under which financial assistance and grants is given to Nigeria along with many other countries in

^{10.} S. Chaturyedi and S.K. Mohanty (2007), "Trade and Investment: Trends and Prospects", *South African Journal of International Affairs*, Special issue: India in Africa, vol. 14, no. 2, p. 54.

^{11.} S. Chaturyedi and S.K. Mohanty (2007), "Trade and Investment: Trends and Prospects", *South African Journal of International Affairs*, Special issue: India in Africa, vol. 14, no. 2, p. 53.

the continent. By their own, Nigeria is still not in a position to do all these things for their citizens.

Many private companies from India are also making their investments in Nigeria in various activities. Reliance, Essar, BHEL and many other have invested in the energy sector in Nigeria and has acquired oil stakes in the country which is useful for both Nations.

Nigeria is still one of the emerging oil producers in the continent with having the potential of many unexplored oil fields within its region. If Indian policy makers decide to continue their journey of energy relation with Nigeria then India can secure the supply of energy resources for the long-term from these countries without any need to look for other potential suppliers of these sources. It has been just a decade for India to start investing in these countries particularly in the energy sector along with contributing in other areas as well which is viewed positively by African countries. Also a strong historical and political legacy with Africa paves the way for India-Africa energy partnership especially with Nigeria.

Thus, it is evident from these facts that India-Nigeria energy cooperation is having prospects for everyone. They just need to work out the problems which are occurring internally within Nigeria and political instability in the region also affects the same. The challenges between India and Africa energy relationship will be discussed in detail in the next section.

Challenges India facing in Nigeria:

There are so many other challenges which makes an impact on ONGC while working in Africa like growing resource nationalism in African people because the peoples of Africa has started thinking to preserve resources for their own development and future generation. There are some other challenges in front of ONGC which needs to be take care like – high cost of acquisition, technology intensive resource, logistically different areas, experienced human resources, unstable fiscal regime, and political instability in African countries, military regimes and environmental stringency/costs. These challenges have to be taken care of while working in these countries some of which are really difficult to get into and work in.

The Indian Government has started recognizing the challenge posed by other competitors in the region as it continues to deepen its economic involvement in Africa. Ministry of External Affairs have taken some new initiatives to support investors from India in these countries to help them in expanding in their business in these countries such as the "Focus Africa Program, ITEC and the India – Africa Partnership Project, launched under the auspices of the Export – Import Bank of India and the Confederation of Indian Industries (CII)."¹²

Moreover, the rising insecurity in Nigeria's delta region is another challenge that India needs to address. Unidentified gunmen kidnapped an Indian national in this region earlier this year. Foreign workers in the delta region have faced a series of kidnappings that come along with demands for large ransom. Several Indians have been kidnapped in the past with the most recent being a tanker crew worker, Banjit Singh Dhindsa, by members of the militant group "Movement for the Emancipation of the Niger Delta (MEND)" who was released later. While the armed groups in the oil-rich region claim to be fighting for resource control, criminal gangs often infiltrate their ranks to engage in robbery and kidnapping. Some reports

^{12.} See, R. Modi (2009). "India and Africa: ideal and natural partners", *Pambazuka News* 444, available at www.pambzuka.org/en/category/features/58068, accessed on 25 April, 2013.

pin the blame for these abductions on members of the group who were granted amnesty and disarmed by the government with a promise of rehabilitation and monetary compensation.

On the other hand, India is also facing competition with other countries like China, Europe, USA, Brazil and many more. China is the real challenge which India is facing in Nigerian oil sector. In recent years China presence in Africa has grown rapidly high. China and India together have now became Africa's most important economic partners, and their growing involvement in the continent is contributing in transforming international relations of Africa in a dramatic way. With the emergence of India and China in the continent, West is no longer in position to enjoy monopoly over Africa's future development. These two powerful economic Asian giants are continuously gaining support from the African countries by providing them aid, and investing in strategic sectors of African economies to leverage international politics, gaining access to growing markets of energy and acquiring much-needed raw materials from the continent.

Nevertheless India should strengthen its efforts to deal with any adverse situation in the near future. At present India has not worked out any plans to tackle this situation with the host country or otherwise. At the same time it should maintain the tempo of its current dialogue with Africa. Finally, while India has pledged a number of development activities to enhance the infrastructure in these countries, the speedy implementation of these would go a long way to cement ties.

The chances of success for India's energy security strategy towards Nigeria is partly defined by the following Nigeria-specific factors: The size and development of Nigerian reserves; the historic relationship between the two countries; the needs and desires of the Nigerian government; political power shifts; OPEC membership and the insurgency in the oil-rich Niger delta.¹³ India uses diplomatic relations, the promotion of economic integration, developmental assistance and security relations to sustain and expand current relations with Nigeria.

India's partnership has changed from focus on ideology to more stress on business interests, trade and resources and India also sees Africa as a partner on global forums. Realist perspective guides India's new approach and at the same time there are elements of soft-power approach visible. India's import dependence for crude oil and listed the supply constraints that challenge India's energy security. India only has 0.5 and 0.6 per cent of global oil and gas reserves, respectively. For energy security, India must explore the options of equity oil, diversified supply and energy diplomacy with Africa. For an outsider, it appears as if India is losing out to China. However, there are also areas where bilateral cooperation is possible.

Overall India's energy security strategy aims to gain increased access to Nigerian reserves and to stabilise and secure the access already acquired. The following factors in Nigeria affect India's ability to increase access and stabilise supplies:-

^{13.} See, R. Modi (2009), "India and Africa: ideal and natural partners", *Pambazuka News* 444, available at www.pambzuka.org/en/category/features/58068, accessed on 25 April, 2014.

^{14.} Cyril I. Obi, 'Nigeria's Oil in Global Energy Security: Critical Issues and Challenges', in Ruchita Beri and Uttam Kumar Sinha (eds.), *Africa and Energy Security: Global Issues, Local Responses,* IDSA and Academic Foundation, New Delhi, 2009, p. 122.

- As far as interest in increased access is concerned, the size of the Nigerian reserves, the historic relationship between the two countries and Nigeria's needs and wants are all relevant factors.
- Nigerian oil and gas reserves have increased substantially in recent years and their reserves are considerable in global terms. Nigeria has the 9th largest gas reserves and the 10th largest oil reserves. As such, this implicates possibilities for increasing access. However, the development of Nigeria's demand for energy could curtail the amount available for export.
- India and Nigeria have historic ties and the success of India's energy security strategy is dependent on the degree to which India can effectively exploit those ties. The ties concern issues including the people of Indian origin, a common colonial experience, a shared language and established diplomatic, economic and security relations. Furthermore, India is viewed as a power with better intentions than the western powers.
- India's insight into Nigerian needs and demands can aid its energy security strategy towards Nigeria. Clear identification of those demands and India's fulfilment of them could influence the success of India's energy security strategy towards Nigeria.
- The stability of supplies from Nigeria is affected by possible constraints on production resulting from Nigerian membership of OPEC and the insurgency in the Niger delta. OPEC can regulate oil production levels and can thus influence the amount of oil and gas India can obtain from their increased access to the resources. However, this has not adversely affected production levels in Nigeria so far. Production levels in Nigeria have been constrained by the turmoil in the Niger delta. The development of this conflict will affect the success of India's energy security strategy towards Nigeria. Furthermore, as far as the assets acquired by Indian oil corporations are concerned, it is important to mention that most acquisitions involve offshore exploration blocks, which are less vulnerable to attacks.
- The last Nigerian factor influencing the stability of supplies is regime change. In the past, new Nigerian leaders tended to review the exploration blocks awarded under the previous administration. As such, elections can affect India's energy security strategy towards Nigeria. It can cause India to lose stakes already acquired in exploration blocks or it can result in exploration blocks previously awarded being remarketed.

REFERENCES

Books:

- Ahn, Sun-Joo and Graczyk, Dagmar (2012). "Understanding Energy Challenges in India", International Energy Agency: France.
- Cheru, Fantu& Obi Cyril (eds.) (2010). *The Rise of India and China in Africa*, London/New York: Zed Books.
- Cyril I. Obi, 'Nigeria's Oil in Global Energy Security: Critical Issues and Challenges', in RuchitaBeri and Uttam Kumar Sinha (eds.), *Africa and Energy Security: Global Issues, Local Responses*, IDSA and Academic Foundation, New Delhi, 2009, pp. 123–138.
- Mwega, F. M. (2006). "China, India and Africa: Prospects and Challenges" AERC-AFDB International

ABHISHEK SINGH

Conference on Accelerating Africa's Development, Tunis:Tunisia.

Articles:

- *Expert Committee on Energy Policy, Draft Report, pp. 1-123.
- * IEA, Findings of recent IEA work 2005, p.1-73.
- Kamboj, Anil (2013). "Energy Security: Indian Perspective", World Focus vol. 399 March 2013 pp.18-24.
- Beri, Ruchita (2003). "India's Africa Policy in the post-Cold War Era: An Assessment", *Strategic Analysis*, vol. 27, no. 2, April-June, New Delhi, pp. 216-232.
- Beri, Ruchita (2010). Prospects of India's Energy Quest in Africa: Insights from Sudan and Nigeria, Strategic Analysis, 34:6, pp.897-911.
- Beri, Ruchita(2010). "India and Africa: towards an Energy Partnership", *Africa Quarterly*, vol. 50, no. 1, February-April, New Delhi, pp. 22-25.
- Hate, V. (2008). "India in Africa: Moving Beyond Oil", Africa Policy Forum, 7th July 2008, pp. 128-144.
- Mathews, K. (2008). "Revisiting India's Foreign Policy in Africa", *Africa Quarterly*, vol. 48, no. 1, February-April, New Delhi, pp. 30-37.
- Kumar, Pramod (2013). "India's Energy Security: Problems and Prospects", World Focus vol.399 March 2013, pp.54-63.

Internet Sources:

- 'Delay Proves Costly for ONGC in Nigeria', The Hindu Business Line, 4 March 2006, at http://www.thehindubusinessline.com/2006/03/04/stories/2006030403920300.htm, accessed on 15.07.2015.
- 'ONGC Mittal Energy under Scrutiny in Nigeria', Indian Express, 3 October 2008, at http://www.indianexpress.com/news/ongc-mittal-energy-under-scrutiny-in-nigeria/368861/, accessed 14 May 2014.

Newspaper Sources:

- "Government loses by refusing to let ONGC acquire Nigeria oil field", *The Press Trust of India*, April 28, 2006.
- "India Loses to China Again", India News Online, 26 June 2006.
- Bagchi, Indra (2011), "Counter the Dragon: with \$ 5billion pledge, India takes big step into Africa", Times of India, New Delhi, 25th MAY, 2011
- ONGC Mittal Energy Signs MoU with Nigeria, The Hindu, 12 November 2005.
- See http://www.hicomindlagos.com/docs/Nigeria-Fact-Sheet.htm. See also 'ONGC Mittal Energy Signs MoU with Nigeria', The Hindu, 12 November 2005, at http://www.thehindu businessline.com/2005/11/12/stories/2005111202620300.htm, accessed on 23.11.2015.
