

India and Africa: Quest for Oil and Gas

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With oil consumption of 3,319,000 barrels per day in 2010, India is the fourth-largest oil consumer in the world after the United States, China and Japan. The International Energy Agency (IEA) notes that India in order to stay on its current growth trajectory will have to increase its energy consumption by at least 3.6 per cent annually, which will lead India's energy demand to double by 2025, compelling it to import 90 per cent of its petroleum requirements. By 2025, India will overtake Japan as the world's third-biggest importer of oil, with consumption of 7.4 million barrels a day.¹ India's gas consumption of 61.9 billion cubic metres in 2010, an increase of 21.5 per cent over the previous year, ranked the tenth-largest in the world.²

In the early years, domestic factors such as the socialist economic policy and international factors such as India's strong ties with the Soviet Union influenced India's choice of energy suppliers. Since the 1990s, the expanding growth rate of the economy has obligated Indian policymakers to view energy as a security issue, and the concept of energy security has increasingly entered government discourse on foreign policy and security policy perspectives. In 1996, to facilitate the acquisition of energy assets abroad, the government established OVL (Oil and Natural Gas Corporation-Videsh Limited). The "Hydrocarbon Vision 2025" and "Integrated Energy Policy" of the Government of India noted, "One route to energy is through the diversification of foreign suppliers and investment in oil and gas ventures overseas."³ In short, India's foreign policy is now concerned with two major aspects of energy bases abroad: diversification and investment. Where Africa is concerned in terms of energy resources, the continent presents the following picture.

- 1) Africa's estimated oil reserves are small compared with those in the Gulf, but the crude from the Gulf of Guinea is light, sweet, viscous and low in sulphur content. This makes for easier and cheaper refining than Middle Eastern oil.

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- 2) Sixty-five per cent of India's oil requirement is met by the Gulf, a region of perennial turmoil. India therefore needs to hedge its bets to ensure its energy security in terms of finding alternative sources.
- 3) Most of the African reserves and wells are located offshore, which decreases transport costs and reduces the impact of political violence.
- 4) Existing sea-lanes can be used for quick and cost-effective delivery. There is no need to worry about the Suez Canal, for instance, or to build expensive pipelines through politically unpredictable terrains.

With its rich reserves and new finds, Africa is fast emerging as a hot spot on the world energy map. It has proven oil reserves of 132,100 million barrels (9.5 per cent of the world reserves) and 14.7 trillion cubic metres (7.9 per cent of the world reserves) of gas. Africa produces 10.098 million barrels daily of oil (12.2 per cent of the world production) and 209 billion cubic metres gas (6.5 per cent of the world's production) (see Tables 1 and 2). Apart from the major energy hubs of Libya, Nigeria, Angola and Algeria, a country with new potential is Cameroon. Egypt is an important player in the oil market of Africa. Mauritania in West Africa, although a relatively small producer, has large unexplored offshore oil reserves, estimated to be about 600 million barrels. Uganda has a potential of 300 million barrels. Other producers include the Republic of Congo and Tunisia. The tiny island country of Sao Tomé & Príncipe is readying itself for an oil boom; it has already signed agreements with different countries to explore the maritime area and jointly owns reserves with Nigeria in the Gulf of Guinea, believed to hold up to 14 billion barrels of oil reserves.⁴

Table 1
Africa's Oil Reserves and Production by the End of 2010

Country	Reserve (thousand million barrels)	Global share (%)	Production (thousand million barrels)	Global share (%)
Algeria	12.2	0.9	1809	2.0
Angola	13.5	1.0	1851	2.3
Chad	1.5	0.1	122	0.2
Republic of Congo (Brazzaville)	1.9	0.1	292	0.4
Egypt	4.5	0.3	736	0.9
Equatorial Guinea	1.7	0.1	274	0.3
Gabon	3.7	0.3	245	0.3
Libya	46.4	3.4	1659	2.0

Nigeria	37.2	2.7	2402	2.9
Sudan (undivided)	6.7	0.5	486	0.6
Tunisia	0.4	*	80	0.1
Other Africa	2.3	0.2	143	0.2
Total	132.1	9.5	10,099	12.2

*Indicates less than 0.05 per cent.

Source: BP Statistical Review of World Energy, 2011.

Table 2
Africa's Gas Reserves and Production by the End of 2010

Country	Reserve (thousand million barrels)	Global share (%)	Production (thousand million barrels)	Global share (%)
Algeria	4.5	2.4	80.4	2.5
Egypt	2.2	1.2	61.3	1.9
Libya	1.5	0.8	15.8	0.5
Nigeria	5.3	2.8	33.6	1.1
Other Africa	1.2	0.6	17.8	0.6
Total	14.7	7.9	209.0	6.5

Source: BP Statistical review of World Energy, 2011.

By the end of 2011, India's imports from African countries was expected to touch 20–21 per cent of its total oil and gas imports, i.e. around 24–25 million tonnes.⁵ India has been importing oil from eight African countries. Nigeria accounts for 11 per cent of India's oil imports,⁶ followed by Angola, Egypt, Equatorial Guinea, Libya, Sudan,⁷ Cameroon and Congo. India imports gas mainly from Nigeria, Equatorial Guinea and Egypt. In 2010, India imported 1.3 billion cubic metres gas from Africa, which constituted 1.06 per cent of India's gas imports that year.⁸

Nature and Extent of Indian Investment

In the view of Narendra Taneja, Chief Executive of the World Oil and Gas Assembly, "Today's growth story is India and in 15–20 years, the growth story will be Africa, and India wants to be in Africa as a strong partner."⁹ For India's 12th Five Year Plan (2012–2017), OVL alone has set a target of over \$12 billion investment abroad, with focus on Africa.

In 2005, Mittal Steel and ONGC announced an investment of \$6 billion to

establish a refinery, power plant and railway lines in Nigeria through a joint venture company, ONGC-Mittal Energy Ltd (OMEL). OMEL will create the infrastructure, and Nigeria will open up to them some of its oil blocks.¹⁰ Essar, another Indian private company, has also procured exploration and production blocks in Nigeria. ONGC has pumped \$2 billion into eight countries in Africa, including Sudan, Libya, Egypt and Nigeria for research and exploration of oil and gas. Indian Oil Corporation (IOC), India's biggest state-run refinery, and Oil India Ltd. (OIL) have invested \$125 million in Libya, Nigeria and Gabon.¹¹ The Gas Authority India Limited (GAIL) has entered into a joint venture with the Egyptian Natural Gas Company (NATGAS) with 15 per cent equity for gas distribution in Egypt¹² and has signed up for pipeline and city gas projects in Libya. GAIL has invested \$22 million in Egypt. While IOC has offered to invest in a gas-based petrochemicals plant, and set up an LNG facility, private companies like Reliance and Essar have sought official support of the Mozambique government to bid there. Apart from GAIL and IOC, the Gujarat State Petroleum Corporation (GSPC) along with other Indian companies has taken the lead in Egypt.¹³ OVL, which is present in two blocks in Sudan, is on its way to joining two more blocks in the country and invest \$200 million in a 741-km pipeline that links Port Sudan on the Red Sea with Khartoum. OVL also wants to buy a 30 per cent stake from Petronas of Malaysia in the massive Block 8 in the Blue Nile Basin. GAIL has announced that it is looking for a stake in an LNG plant in Nigeria and has been interested in setting up a gas-based petrochemical plant there.

In March 2006, India signed an MoU with Mauritius for exploration of hydrocarbon deposits offshore.¹⁴ In South Africa, India is negotiating for setting up LPG logistics. It is also helping PetroSA for utilization of coal-to-liquid (CTL) technology, working for bilateral cooperation in setting up of a CNG network in South Africa, and facilitating training facilities to South African personnel in the hydrocarbon sector.¹⁵

In Côté d'Ivoire, OVL plans to invest in offshore drilling. GAIL is developing CNG facilities in Ghana and has offered an area of cooperation in which Engineers India Limited (EIL) could assist in engineering and technical consultancy services in the country. In Ethiopia, OVL has a plan to set up a refinery and has offered assistance in developing a pipeline network along with building infrastructure for transportation of LNG in smaller quantities to places not connected by the pipeline. In Madagascar, Essar has procured exploration and production blocks.¹⁶

India's Resource Diplomacy

Seen as an initiative to shift dependence on the Organization of Petroleum Exporting Countries (OPEC) to other sources of energy, cope with the alarming rise in crude oil prices and refusal of OPEC to enhance production, India conducts an India-Africa Hydrocarbon Conference every alternate year. This sector-specific conclave is similar to the one adopted by China. India has signalled that it is interested not just in buying Africa's oil but in participating in all phases of its exploration and production to distribution through refining, storage and transportation.¹⁷ The conclave has been conceptualized with the objective to foster bilateral trade relations in the hydrocarbon sector, understand policy and regulatory frameworks and offer opportunities for investment in upstream and downstream sector of the two regions. By engaging African countries more closely, India expects to reach out to the identified countries in a more focused manner and expand its presence across the hydrocarbon value chain in Africa.

In its first ever summit meeting (2008) with leaders from the continent, India offered \$5 billion credit and hundreds of millions of dollars of financial help to African nations. Prime Minister Manmohan Singh told leaders of fourteen nations in the first India-Africa Forum Summit that New Delhi would provide half a billion dollars in grants for development. Since 2008, the India-Africa Forum Summit, held every year, apart from other things, has opened the strategy of aid-for-oil by extending credit in the form of soft loans.¹⁸ Since 70 per cent of Africa's oil wealth is concentrated in West Africa's Gulf of Guinea, India has pledged \$500 million concessional lines of credit (LoC) to eight West African countries – Burkina Faso, Chad, Equatorial Guinea, Ghana, Guinea-Bissau, Coté d'Ivoire, Mali and Senegal –with whom it has formed the TEAM-9 initiative for different projects and initiatives.¹⁹ Under this initiative, New Delhi provides LoC finance through Exim Bank for setting up of various social and economic projects by Indian companies, with the government playing the role of facilitator.

China's Aggressive Foreign Policy: Where does India Stand?

China's "go out" strategy, according to Tan Zhuzhou, President of the China Petroleum and Chemical Industry Association (CPCIA), involves Chinese firms proactively going out to other parts of the world such as Africa and applying their technical expertise and financial resources for the exploitation of oil resources there.²⁰ According to the IEA, China's 5.46 million barrels daily oil consumption in 2009 crossed Japan's consumption of 5.43 million barrels.

China's energy requirement for its expanding and growth-oriented economy brings the two Asian giants – China and India – closer to the African energy market.²¹ When Indian companies first started making a concerted effort to secure projects abroad, they were paying what many international oil companies thought were exorbitant amounts; not because of competing bids from the Chinese companies, but because of their late start, were seen to be losing in the game.²²

Some pertinent questions arise in this context: Will China 'conquer' Africa? Will India catch up with the Chinese competition? Does Beijing gain oil concessions and invade the African market with its own goods? And will New Delhi launch the idea of a new, fairer and more egalitarian partnership with the governments of the continent? The Indian government has made it clear that India is not in competition with China or any other country in Africa, but China is undoubtedly India's foremost rival in strengthening ties with the African countries in the oil and gas sectors.²³ China has been providing the African countries a complete infrastructure package in return for access to the energy fields. Indian officials and policymakers admit that India does not have the resources to compete barrel for barrel with China in West Africa.²⁴

For example, in Angola, India had almost clinched a deal with Shell to purchase a 50 per cent share in an oil exploration project. It had offered \$200 million in aid. But China offered Angola \$2.3 billion. Subsequently, Angola's state-owned Sonangol reportedly blocked the Indian move by exercising pre-emptive rights.²⁵ In 2005, India's government disallowed OVL to acquire assets in Nigeria on security grounds, pending the Nigerian government taking measures to enhance security in the region. Likewise, a Nigerian licensing round for 45 oil blocks in 2007 was refused by ONGC-Mittal due to security concerns.²⁶ But Chinese firms came forward and procured assets without putting forward any reservations.²⁷ There are several other similar examples where India has lost deals to China.

In 2006 Indian and Chinese national oil companies agreed to bid jointly for stakes in blocks and companies as part of a larger set of cooperative energy agreements. But the agreements were short-lived. Despite this hiccup, India recently approached China to take a collaborative approach. The Chinese response seems to have been supportive but noncommittal.²⁸

Hindrances to Oil Exploration: Local Resistance and Civil Strife

In the last three years production of both oil and gas in Nigeria has experienced

intensive shut-ins, due to banditry, terrorism or pilferage from pipelines. The biggest victims of these shut-ins were Shell, Chevron and Agip. The Movement for the Emancipation of the Niger Delta (MEND) and Federated Niger Delta Ijaw Communities (FNDIC) are two organizations operating in Nigeria which often resort to terrorist attacks, kidnapping and other forms of criminality, with the goal of isolating the region and acquiring control of energy production. They are not only seriously damaging infrastructure, but are also dramatically increasing the cost of production and discouraging investment.²⁹ In Angola, oil-rich Cabinda enclave borders the Democratic Republic of Congo and Congo Brazzaville, with access open only to the ocean. Destabilizing activities of the local irredentist movement FLEC (Front for the Liberation of the Enclave of Cabinda) and the generally volatile situation make economic activity in the region difficult and risky.³⁰

In Chad, Idriss Deby, who has declared himself President for Life, faces growing internal opposition from a rebel group, United Front for Change (FUC). The FUC has based itself in Darfur of Sudan.³¹ In Sudan, following geopolitical disputes between Sudan and South Sudan, OVL has discontinued crude oil production in the South Sudan territory.³² Oil has been discovered recently in Puntland region of Somalia. But piracy in the seas adjoining Somalia and the situation of state collapse in the region limits India's approach to the Horn of Africa. The so-called Arab Spring also is a concern for Indian policymakers since the afflicted nations are still volatile and are expected to remain so in the short-term future at least.

Energy Deficit in Africa could Hamper Export of Oil and Gas

Africa is in dire need of practical and feasible solutions that will harness the abundant energy resources available for the benefit of the continent. The installed power generation capacity in sub-Saharan Africa is 66 GW. If South Africa is excluded, this leaves 28 GW for over forty-five countries, which is less than the installed capacity of Poland alone. Also, a significant proportion of this capacity is not in usable condition. In 2005, approximately 24 per cent of the population of sub-Saharan Africa (500 million) had access to electricity, compared to 54 per cent in South Asia and 90 per cent in East Asia, the Middle East and Latin America.³³ The continent's 930 million inhabitants consume the least amount of energy per capita and the whole continent consumes only 9 per cent of its total oil production. Africa's share of world energy consumption is only 3 per cent compared to its 14 per cent share of the world's population.

Though statistically Africa is one of the world's major net exporters of energy resources, only seven countries are net energy exporters. Biomass provides over 80 per cent of domestic primary energy supply across sub-Saharan Africa, even in major petroleum-exporting countries. Electricity contributes less than 3 per cent of total final energy consumption. Some 45–50 per cent of the electricity is generated from hydropower, with an equal amount from oil- and gas-fired thermal power plants. The continuing dominance of biomass – wood fuel, dry shrubs, agricultural residues, and sun-dried animal dung – is due to the limited access to electric power supply.³⁴

Recent macroeconomic data indicate that sub-Saharan African economies are undergoing rapid economic expansion, with real GDP growth rate of 6.5 per cent in 2007.³⁵ To sustain an economic growth rate of 5 per cent, sub-Saharan Africa would require annual expansion in electricity generation capacity of 4 GW; at present, barely 1 GW is being added. Hydrological stress and high costs of fuel have further reduced energy output from existing usable capacity. The African continent is also facing challenges in hydrocarbons exploration. Oil production in Gabon is already declining because of peaking in the greatest part of its oilfields. Congo Brazzaville seems unable to recover from its usual low.

Prospects for India in the African Energy Market

The prospect for India in terms of opportunities in the African oil and gas sector, in spite of the challenges described above, would come through the goodwill that India has earned in Africa.

1. The African goodwill for India has been galvanized based on India's development-centric approach and the African countries' admiration for India as a rising economic and knowledge power.
2. India is dynamically engaging Africa through fora such as the India-Africa Hydrocarbon Exhibition, India-Africa Forum Summit level meetings, ITEC programme, TEAM-9 initiative, LoC support and NEPAD, BRICS and IBSA.
3. Africans are wary of a second colonial scramble for Africa. France, a former colonial power, has been a pioneer in hosting grand summits. But radical African leaders such as late Thomas Sankara of Burkina Faso criticized colonialism and imperialism in the annual Franco-African summits.³⁶ The US also has announced the creation of the United States Africa Command (AFRICOM) and is eagerly looking out for military

alliances on the continent. AFRICOM is reportedly a response to the growing Chinese presence in Africa.³⁷

Meanwhile, a number of African countries such as Nigeria, Lesotho, Swaziland, Ghana, Uganda, Kenya, South Africa, Morocco, Botswana and Namibia have expressed deep concern over cheaper Chinese exports and their adverse impact on employment, domestic products, and bankruptcy as a whole in the region.³⁸ Protests by trade unions in 2006 galvanized South African President Thabo Mbeki to warn China of the risk that “Africa could fall into a colonial relationship and the dumping of goods had to stop”.³⁹ Assessing the impact of the Chinese industry on the African economy, the African Union (AU) Commission president Alpha Oumar Konare warned, “Resource-hungry economies that desire to extract the continent’s resources will have to commit themselves to real investment that benefits Africa”.⁴⁰

India is seen in a different light. In the opinion of Alpha Oumar Konare, “India-Africa partnership will help African countries to achieve their millennium development goals”. While gaining from Africa’s oil, New Delhi gives back and contributes to capacity building of the African people in the form of training and skilled labour force for efficiently running the assets. By hiring and training locals at certain stages of the projects, the Indian firms give Africans an equitable stake in the success of the project. Their involvement has a deep impact upon their self-esteem.⁴¹ The India-Africa partnership has helped the African countries to gain a great deal from India’s experience in poverty reduction, economic development, micro-credit and rise of the middle class in the African region.

4. India is not always a loser to Chinese competition in the continent. For example, when in 2003 a Canadian oil firm decided to sell its interests in Sudan and the China National Petroleum Corporation (CNPC) wanted to purchase them, Khartoum awarded the 25 per cent stake to an Indian firm instead.⁴² This was largely an outcome of India’s robust relationship with Sudan.

Conclusion

New Delhi has been working with the African nations for an enduring partnership, based on sustainable development, mutual respect and mutual benefit. This endeavour is partly motivated by India’s quest for energy sources. This quest, however, faces various challenges.

In their quest for Africa's energy resources, both India and China are learning to fine-tune their bilateral balancing act. It is a fact, however, that India has lost several lucrative oil deals to China, and New Delhi seemingly lacks the unyielding strategic drive that Beijing has deftly displayed in the continent. As former Petroleum and Natural Gas Minister Murlu Deora stated, "India must offer a radically different model of aid and economic cooperation that will certainly look at Africa aggressively for oil and gas assets to ensure energy security for the country." India's model should be one that is mutually beneficial and not considered "exploitative" or "colonial".

To promote its profile in Africa, India needs to increase its interaction with Africa through more high-level visits, opening up more Missions in regions where it is under-represented, and open up special units within the Missions to look into and streamline energy issues in the countries concerned. There also needs to be sustained proactive diplomacy to encourage the private sector to spur its investment in the continent.

Notes

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- ² *BP Statistical Review of World Energy*, 2011.
- ³ Dinshaw Mistry, 2011, "Domestic and International Influence on India's Energy Policy, 1947–2008", in Sumit Ganguly (ed.), *India's Foreign Policy: Retrospect and Prospect*, (New Delhi: Oxford University Press), p. 325–26.
- ⁴ "Africa's Major Oil Producers", 2009, <http://www.africagoodnews.com/energy/africas-major-oil-producers.html>
- ⁵ Nicola Pedde, 2008, "The Myth of African Oil and Gas", <http://www.se2.isn.ch/serviceengine/Files/ESDP/97959/...E021.../Chapter+9.pdf>
- ⁶ According to the *New York Times*, 3 April 2008, bilateral trade in oil and gas between India and Nigeria was estimated at \$7.9 billion by the end of 2008.
- ⁷ In this paper, Sudan is understood in terms of undivided Sudan.
- ⁸ n. 2.
- ⁹ Tim Cocks, "Investing in Africa: Resource-hungry India Seeks to Increase its Economic Ties with Africa", *The New York Times*, 03 April 2008.
- ¹⁰ Sudha Ramachandran, 2007, "India pushes people power in Africa", http://www.atimes.com/atimes/South_Asia/IG13Df03.html
- ¹¹ In Libya, IOC has 50 per cent stake in Blocks 86 and 102(4); OIL has 50 per cent stake in both these blocks and 25 per cent stake in Area 95/96 and Blocks 2/1, 2 and 4; in Nigeria, IOC and OIL have 17.5 per cent stake each in Block OPL 205; in Gabon, they

have 45 per cent stake each in the Shakti project.

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- ²⁰ Pant, 2008, n. 12, p. 210.
- ²¹ S.K. Pradhan, 2011, "Are the Elephant and Dragon in Brawl? A comparative perspective of India and China in Africa", *World Focus*, xxxii (11–12): p. 872.
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- ²³ Statement of Prime Minister Manmohan Singh at the India-Africa Forum Summit, New Delhi, 2008, in *The Economic Times*, 9 April 2008.
- ²⁴ *Taipei Times*, 16 October 2004.
- ²⁵ Ibid.
- ²⁶ "India and West Africa: A Burgeoning Relationship", 2007, Chatham House briefing Paper.
- ²⁷ Dinshaw Mistry, 2011, "Domestic and International Influence on India's Energy Policy, 1947–2008", in Sumit Ganguly (ed.), *India's Foreign Policy: Retrospect and Prospect*, New Delhi: Oxford University Press, p. 329.
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- ³⁷ Ibid.
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