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# Energy Security and India's Diplomatic Effort

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## Prologue

Energy, which is one of the focus areas for this issue, is of paramount importance in the context of environment & sustainable development. Petroleum and Natural Gas play a major role in energy security in India. Around 80% of oil has to be imported and thereby underlines its importance.

The Author, who is in the Indian Foreign Service, has extensive diplomatic experience in the Gulf region, as also in the Ministry of Petroleum & Natural Gas.

In this perceptive and excellent Article, India's Ambassador to Saudi Arabia, Talmiz Ahmad gives an overview of the supply and demand scenario in this vital sector. The various initiatives taken in ensuring energy sources and their transportation, and the multilateral agreements being forged diplomatically, have been highlighted. The Paper, by one who is in the midst of it all, makes for very compelling reading.

- Editor

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The *Hydrocarbon Vision 2025*, published by the Government of India in February 2000, set out starkly India's energy security predicament: its crude oil self-sufficiency declined from 63% in 1989-90 to 30% in 2000-01. In the future, the situation is likely to get worse: India's demand for oil is expected to increase from 122 million tonnes in 2001-02 to 196 million tonnes in 2011-12, and 364 million tonnes in 2024-25. Domestic production during this period would increase from 26 million tonnes to 52 million tonnes in 2011-12, and to 80 million tonnes in 2024-25. In 2024-25, crude oil self-sufficiency would be a mere 15%. The situation relating to gas is equally grim.

In response to this negative scenario for India's energy security, the *Vision 2025* document set out an elaborate Action Plan for the acquisition of hydrocarbon resources required by the country to meet its economic requirements. It provided,

inter alia, for a robust effort to expand domestic production of oil and gas through the liberalization of the oil sector, encouragement to the entry of private Indian and foreign companies, investments in technology and R&D, etc.

Since the study was the first of its kind in India, it had certain obvious limitations as it only looked at the hydrocarbon (oil and gas) scenario, and did not touch upon the other sources of energy required for national development. The *Integrated Energy Policy* document published by the Planning Commission in August 2006 corrected the shortcomings of the *Vision* document by taking a holistic view of India's energy requirements to meet a minimum growth rate of eight percent per annum upto 2031-32, i.e., the end of the 15<sup>th</sup> Five Year Plan. Given the high level of import dependence and the need to obtain the latest foreign technologies to enhance the country's domestic resources and capabilities that were set out in this document, India had to commit itself to pursuing a robust "Energy Diplomacy" consisting of substantial, pro-active and multi-faceted engagements across the world to promote India's energy security interests. These overseas engagements are aimed at achieving the following:

- Significant enhancement of domestic resources and capabilities by bringing in state-of-the-art technology and expanding the national knowledge base.
- Acquisition of two types of assets abroad:
  - Equity participation in producing fields.
  - Exploration and production (E&P) contracts, both on-shore and off-shore, in different parts of the world.
- Participation in downstream projects (refineries and petrochemicals) in producer and consumer countries on the basis of criss-cross investments.
- Finalisation of long term LNG contracts.
- Setting up of transnational gas pipelines.
- Obtaining technologies to promote sustainable energy use, including conservation, increased use of environment-friendly fuels, and development of unconventional and non-conventional energy resources within the country.
- Promotion of intra-Asian dialogue between producers and consumers, encouragement for intra-Asian investment, and development of Asian capabilities, resources and infrastructure.

India's long term interests lie in setting up alliances at bilateral, regional and global levels that would bring together different capabilities in joint partnerships. The proposed cooperation ranges across the energy value chain, and includes prospecting in each other's territories, and developing downstream and petrochemicals capacities in addition to exchanges relating to R&D, technology, safety norms and training. Beyond the bilateral aspect, it includes the possibility of Indian and foreign national companies working together on specific projects in third countries. The Indian hydrocarbon strategy has already begun to yield some positive results. We have a 25% equity participation in a producing field in Sudan, which provides India with three million tonnes per annum. We have also secured E&P contracts in Sakhalin (Russia), Nigeria, Oman, Iran, Vietnam, Myanmar, Venezuela, Colombia and Cuba.

It is important to note that India's external hydrocarbon strategy is being implemented in a highly competitive international environment which is made up of international and national oil majors contending vigorously for assets in the few new areas in which they are available, i.e., in the Caspian, in Western and Central Africa, and in some parts of Latin America, while consolidating their presence in the Gulf. The scramble for oil resources poses a unique challenge to India's energy diplomacy in that it requires us to explore new engagements or, alternatively, to imbue traditional political relationships with a new energy-related value.

Accordingly, India has set up a series of "strategic energy partnerships" with different countries. Some of these are as follows:

- **The Gulf countries** are the principal source of India's oil imports (65%) and, hence, are potentially India's major energy partners in respect of both upstream and downstream areas as also investors in India's refinery and petrochemicals sectors.
- **China:** India is looking at multi-faceted cooperation across the hydrocarbon value chain, as also joint bids in exploration and other projects in third countries.
- **Russia:** India is already a major investor in the Sakhalin-I oil and gas project, and is looking at expanding its role in the development of Russia's oil and gas potential as also in working with Russian companies in third countries.
- **Central Asia:** India is looking at equity participation in the oil and gas sectors in this region, as also in the development of gas pipeline projects.
- **Japan & Republic of Korea:** Both of them have highly developed capabilities in regard to energy efficiency and the use of new and renewable energy and, hence, are partners in regard to the enhancement

of India's knowledge-base in conservation, environment friendly fuels and strategic and commercial storage.

- **Nigeria, Angola and Sudan:** Indian companies are already well-placed in Nigeria and Sudan in regard to exploration as also equity participation in producing fields. India is actively pursuing partnerships with other Saharan and sub-Saharan countries to develop their potential.
- **Latin American countries:** Countries such as Venezuela, Brazil, Colombia, Ecuador and Cuba have offered exploration contracts to Indian companies and are in a position to share their technology in regard to production and refining of heavy oil.
- **Norway:** It is a world leader in regard to deep sea exploration as also in other aspects of the hydrocarbon industry, such as technology, health and safety.
- **USA, UK, Canada:** These are world leaders in regard to research and development pertaining to conservation, efficiency and use of unconventional and non-conventional fuels, e.g., gas hydrates, coal gasification, gas to liquid, coal bed methane and ultradeep exploration.

### Transnational Pipelines

Transnational oil and gas pipelines are not only able to transport large quantities of hydrocarbons across hundreds, and even thousands, of kilometers, but, given their reach and range and the terrain they traverse, they also have significant geopolitical implications and even the ability to influence bilateral relationships and regional cooperation scenarios.

In order to meet its gas requirements, India is vigorously pursuing gas pipeline projects on its land frontiers. For instance, the Iran-Pakistan-India pipeline is expected to bring to India nearly 90 MMCMD of gas which will be utilized to fuel power and fertilizer projects in North and North Western India. India has also agreed to participate in the Turkmenistan- Afghanistan-Pakistan Pipeline (TAPI).

All these pipeline proposals, being trans-national in character and involving neighbouring countries with complex histories in terms of bilateral relations, are fraught with political and security-related problems that would need to be addressed. If these projects are to be realised, it must first be accepted that they are extremely important, indeed critical, for India's energy security interests. Once this is understood, international best practice can readily yield arrangements that would put in place security-related inputs in regard to all aspects of the projects – technical, financial, commercial and legal, that would serve to insulate the projects from the

vagaries of day-to-day politics and provide the desired level of comfort to our policy-makers.

### **Multilateral Cooperation**

In recent years, oil-related think-tanks have engaged in a debate on whether supply of hydrocarbons has 'peaked' so that the next few years will see a steady decline in supplies, with consequent implications for prices, economic development programmes and heightened political contentions. However, the emerging view is that hydrocarbon resources are available to meet demand over the next 30-50 years. Historically, though predictions of 'peak oil' have been made from time to time, global production has regularly increased to meet demand. As Daniel Yergin has pointed out, new technologies have made it possible for oil companies to find new sources of oil and extract oil from old sources. However, there is no room for complacency since new oil will be available in physically challenging areas such as the deep sea or frozen terrain or environmentally sensitive locations. Again, it will require very huge investments for its extraction, amounting cumulatively to about \$ 5 trillion upto 2030, at the rate of \$ 20 billion per annum.

Meeting the global demand for oil and obtaining the financial resources to ensure supplies requires the rejection of political contentions based on narrow national considerations and, instead, an integrated global effort to pool together the world's human, financial and technological resources to explore and develop these difficult and sensitive areas in a spirit of co-operation based on considerations of mutual benefit.

India took the first significant step in promoting this co-operation at regional level by convening a Round Table, in New Delhi, in January 2005, of the four principal Asian oil-consuming countries – China, Japan, Republic of Korea and India, getting into dialogue with the principal oil-producing countries of West Asia and South East Asia. This was complemented by the initiative to bring together, in November 2005, the same four principal Asian oil-consuming countries in dialogue with oil-producers of North and Central Asia, including Russia, Kazakhstan, Uzbekistan, Azerbaijan, Turkmenistan and Turkey.

The assembled Ministers agreed on the importance of this first dialogue between Asian consumers and producers, and, in a consensual statement, identified substantial commonality of interest as also areas of cooperation. They also recognized that, for the interests of the Asian consumers and producers to be pursued effectively, the knowledge-base of Asian countries would have to be expanded even as the Asian producers and consumers develop policies and programmes linked with promoting criss-cross investments in each others' hydrocarbon sectors as also in the areas of conservation and efficiency and environment protection.

This regional dialogue has thrown up a number of specific areas for cooperation; these include: reform of the Asian oil markets; promotion of criss-cross

investments in hydrocarbons between producers and consumers; development of strategic reserves; development of the Asian gas pipeline grid; development and transfer of R&D and technology; and development of capabilities to promote energy conservation and efficiency and environment-friendly fuels. The Ministers have agreed to meet annually to pursue their consensual plan of action.

There is now a slow but steady acceptance that national energy security interests are best served by pursuing policies of cooperation so that energy resources can be harnessed efficiently for regional and global development. The oil market is already integrating in significant ways: there is a clear trend in favour of oil companies integrating across the hydrocarbon value-chain, from exploration to production to transportation, to refining and to petrochemicals. E&P proposals in producer countries are increasingly being linked to refinery proposals and, on occasion, to other infrastructure development proposals such as roads, railways, mining, and port development projects. Hurricane Katrina, by damaging US facilities across the entire supply system in the region, has re-defined energy security to mean, as Yergin has noted, "the security and integrity of the whole supply chain and infrastructure from production to consumer." Above all, the surge in global demand for hydrocarbons represents, in Yergin's words, "the success of globalization – the best global economic performance in a generation."

After over 250 years of colonial domination and internecine conflict, it is only in the last few years that Asian countries have begun to see the prospect of peace and the opportunity to pursue intra-continental interests in a relatively congenial environment. Opportunities have emerged to pursue energy interests through cooperative ventures that include investments in upstream and downstream hydrocarbon projects, sustainability proposals and infrastructure projects, particularly transnational pipelines.

Such cooperative ventures are facilitated by the fact that, unlike the colonial era and the Cold War period, Asia currently has the technological, financial and human resources required to pursue these projects. Hence, not surprisingly, every multilateral grouping in Asia is according the highest importance to energy-related issues, in the confident hope that energy cooperation and interdependence could nurture peace and prosperity in Asia just as the European Coal and Steel Community laid the foundations for the European Union fifty-five years ago.

### References

1. India Hydrocarbon Vision 2025, Ministry of Petroleum and Natural Gas, Government of India, February 2000.
2. Report of the Integrated Energy Policy, Planning Commission, 2006.
3. World Energy Outlook, 2010.

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