



National
Maritime
Foundation

The Role of Energy Security in China's Foreign Policy: A Maritime Perspective

Joshy M. Paul*

Energy, particularly oil and gas, has become a strategic component of China's foreign and security policy in recent times. Beijing's search for resources for its economic success has created a notion of "scramble for energy" that portrays China's increasing activity in the energy sector worldwide through investment and equity stake considered as a political strategy by the Chinese elites. In this energy hunt foreign policy option, China faces increasing security problems as its energy passes through the Malacca Strait and also the Indian Ocean region. As a result China pays significant attention to secure the sea-lanes of communication and for that Beijing applies a combination of diplomatic and military mechanisms in its overall foreign policy arena. In this scenario, its energy security could lead to some kind friction with other countries of the Indian Ocean littoral area, including India. In this regard this work attempts to analyse different aspects of China's energy security policy and its implication for India.

Introduction

The issue of energy security has emerged as a major challenge for many countries in recent times. This is especially true for rising powers like China and India as their energy consumption has risen significantly in light of steep economic growth. Before China's entry into the exploration and production (upstream) sectors overseas on a

*Joshy M. Paul is a Research Associate at the NMF. He can be reached at mpjoshy@gmail.com

large scale, this sector was largely controlled by Western oil companies under purely market-cum-profit orientated business. Presently, however, it has become an important aspect of foreign policy tool of every nation. China, a nation focused primarily on a Pacific orientated security policy has now enlarged its scope and begun to focus increasingly on the Indian Ocean region under the rubric of energy security calculation that has created concern and consternation among other powers particularly India. In this context this article seeks to analyse China's energy security policy with regard to the Indian Ocean region and its strategies to counter various threat perception the country faces.

Energy security, broadly defined, means adequate, affordable and reliable supplies of energy.¹ It matters because energy is essential to economic growth and human development; especially for developing countries, affordability is an important component for its overall growth. Yet no energy system can be entirely secure in the short term, because disruptions or shortages can arise unexpectedly, whether through sabotage, political intervention, strikes, technical failures, accidents or natural disasters.² Secure energy supply is a public good, as the benefit derived from it by one consumer does not reduce the benefit to everyone else. Markets alone do not reflect the cost to society of a supply failure because it is beyond the power of an individual supplier or consumer to guarantee security. Put another way, all market players benefit from action to safeguard energy security, whether or not they have contributed to it. For these reasons, governments must take ultimate responsibility for ensuring an adequate degree of security within the framework of open, competitive markets.

Scarcity of oil can cause an imbalance in energy security scenarios. Oil and gas is geographically distributed in terms of consumption and distribution. The Organization of Economic Cooperation and Development (OECD) countries hold just 7 per cent of global proven surplus oil resources, yet consume around 60 per cent of world supply. The corresponding figures for the Asia-Pacific region are 3.3 per cent and 30.1 per cent, those for the US 2.4 per cent and 22.5 per cent, for China 1.2 per cent and 9.6 per cent.³ In other words, major oil and gas consumers happen to be resource poor advanced countries, whereas producing countries are mostly located in the developing world, barring India and China, and many of them are affected by chronic political instability or are under authoritarian regimes. In a way, political unrest at the production centres and geopolitical instability or tensions in international security

including armed conflict or terrorism could disrupt the passage of oil and eventually lead to instability in the energy supply system. Evidently, higher consumption of oil by the developed countries and demand for increasing oil from countries like India and China will naturally aggravate scarcity in the oil supply system.

Countries have adopted strategies to decrease vulnerability in the energy sector which could affect their overall economic performance. For instance, soon after assuming charge as the President of the United States, George W. Bush emphasised energy as a top priority of US foreign policy and formed the National Energy Policy Development group under Vice President Dick Cheney. The Group submitted the National Energy Policy Report in 2001 which stipulated the policy options including: increased domestic production, diversification of the market, modernisation of storage, and enhancement of relevant infrastructure.⁴ Similarly, Japan, which imports 98 per cent of its hydrocarbon consumption, brought out “Japan’s New National Energy Strategy” in 2006, which explains the requirement to fulfil of various strategic goals before 2010.⁵ China, the second largest energy importer after the US, published a “White Paper on Energy” in 2007, viewed as a comprehensive policy on energy in China. According to the document:

*“the sustained growth of energy supply has provided an important support for the country’s economic growth and social progress, while the rapid expansion of energy consumption has created a vast scope for the global energy market. As an irreplaceable component of the world energy market, China plays an increasingly important role in maintaining global energy security”.*⁶

As per the white paper, the basic themes of China’s energy strategy are premised on six components: giving priority to thrift, relying on domestic sources, encouraging diverse patterns of development, relying on science and technology, and increasing international cooperation for mutual benefit.⁷ Theoretically speaking China’s effort to source energy from abroad is a temporary phenomena until China becomes self sufficient in energy sector through domestic production.

Although the demand and supply of oil mismatch will continue for quite some time, production will be heightened in a bigger way as drastic rise in demand and soaring prices have stimulated a new wave of exploration. An International Energy Agency (IEA) forecast puts global demand for investments in energy facilities to

be around \$17trillion.⁸ The Middle East and North Africa would attract around \$ 56 billion as investments in the upstream exploration sector alone. The US's Energy Information Administration (EIA) report forecasts that oil production in the OPEC (Organization of Petroleum Exporting Countries) will jump from 34.01 million barrels per day in 2005 to 52.7 million barrels per day in 2025 or an increase of 54.9 per cent.⁹ Similarly, worldwide oil consumption reached 84 million barrels per day(mb/d) in 2008, up from 78mb/d in 2002, and by 2025 it is expected to be 119 mb/d.¹⁰

While the proven and unexplored fossil fuel can provide adequate energy for at least the next couple of decades, most countries are increasingly worried about the long-term scenario. Volatility in prices and possible disruption in the supply side are major areas of concern. When a disruption happens in the supply side as a result of armed conflict, terrorist attack on an oil tanker or on a pipeline route and a naval blockade, prices of oil will skyrocket and this will eventually affect all importing countries. In a way a state's response strategies and market mechanism on energy lifelines is inextricably linked in the case of energy security. China, as the second largest importer of oil tends to be highly vulnerable to such kind of situations. In 2008 China imported 47.4 per cent of its oil requirements,¹¹ which may increase to almost 70–80 per cent by 2020.

Energy Security and Foreign Policy

China's emergence both in politico-military levels and on the economic front has generated great attention from international analysts. Its search for resources, particularly energy, for its economic success has created a notion of a "scramble for energy" that portrays its increasing activity in the energy sector worldwide through investment and equity stake as a political strategy by the Chinese elites.

Evidently, the increasing political clout and economic activity abroad have created two divergent views of China's foreign policy of which energy security is an important aspect. The dominant one holds that the Western approach is rooted fundamentally in the realist perspective. It argues that China's emergence as a military-cum-economic power inevitably lead to a challenge to the US's global supremacy. One of the most important books making this argument is Alastair Johnston's *Cultural Realism: Strategic Culture and Grand Strategy in China's History of*

1995.¹² Johnston found Chinese foreign and security policy making – at least from the Ming until the Mao period – to be structured by a *parabellum* strategic cultural outlook, which

*“assumes that conflict is a constant feature of human affairs, that it is due largely to the rapacious or threatening nature of the adversary, and that in this zero-sum context, the application of violence is highly efficacious for dealing with the enemy”.*¹³

Similarly, works by Michael Swaine of RAND and Andrew J. Nathan and Robert Ross support the same logic about China's intention and its path towards achieving a great power status.¹⁴ The other school of thought – one that most Chinese scholars follow – argues that China's pursuit of resources overseas is part of a wider process of globalisation. According to them, China has neither the intention nor the wherewithal to challenge American supremacy globally, but rather it needs more cooperation with all countries including the present hegemon, the US.

According to Pang Zhongying of Nankai University:

*“in order to prevent energy security from simply being a function of market dynamics, a deliberate strategy involving geopolitics and economic factors needs to be crafted”.*¹⁵

Men Hinghua from Central Party School's International Strategy Institute University counters Johnston's *parabellum* perspective and argues that “China's strategic culture is built upon such traditional fundamental concepts as benevolence, propriety, morality and harmony”,¹⁶ while David Zweig and Bi Jianbai argue that:

*“China's increasing hunt for energy resources at large has been as a result of its booming domestic economy, rapid industrialisation, increased export processing and the Chinese peoples' voracious appetite for cars are increasing exponentially”.*¹⁷

Similarly, Beijing's access to foreign resources is necessary for both continued economic growth and the survival of the Communist Party, since growth is the cornerstone of China's social stability¹⁸.

While analysing China's global hunt for energy, it can be argued that energy security plays a major role in China's larger foreign policy objectives. According to Luo Shou and Wang Guifang of the Military Science Institute Strategy Research Division, there are three stages in China's rise.¹⁹ In the first stage China will "construct a secure surrounding environment" by developing "strategic partnerships" with neighbouring countries, especially Russia, India and Japan, and by playing an active role in regional organisations like ARF, SCO, and the newly created EAC, with a view to constructing a surrounding environment that will guarantee the sustainability of its economic growth, secures its social stability and affirms that its international political position will continually rise.

The second stage requires moving beyond the Asian region in order to mould a global security environment more beneficial to China's interests. In this stage China expands its feel-good or benevolent factor to other regions; this demands that China behave diplomatically, shoulder more responsibilities and make more contributions.²⁰ By the end of this stage strategic relations between China and the US will stabilise as the US, however reluctantly, acknowledges the reality of the Chinese power. China's relations with Europe will expand from being mostly economic in nature to jointly defending the integrity and stability of the Eurasian continent, including through military cooperation.²¹

When China enters the third stage – towards the middle of the century – it will have joined the ranks of the world's supreme powers. Its primary task will then be to "plan and operate" a new international political and economic order that can universally be accepted by international society.²² Accordingly, the "plan and operate" stage will be the highest level of the peaceful rise, and by then China's national interest will have fundamentally completed the process of fusing with the global interest.²³

In this analysis, it can be argued that China's current drive for controlling energy assets abroad is a combination of West's realist view and China's globalisation strategy. There are four reasons to believe this. First, China is effectively challenging US supremacy by using its UNSC membership to protect states like Sudan and Iran and also North Korea (though North Korea is not a mineral rich country) by making inroads into these countries natural resources. Second, when nations emerged as a great power status they did control the natural resources beyond their borders. For instance, during the colonial period Germany, France and Britain largely controlled the natural

resources rich regions of Asia and Africa. Similarly in the post world war period the United State's held sway in Latin America, especially during 1960 and 1970s.

The continuing presence of the US in West Asia is another example. And since China is a super power in the making so it is important for them to have a major stake in natural resources. Third, its new energy security oriented foreign policy has provided maximum friends for China than the earlier period. Developing countries nowadays no longer carry the perceived threat of communist coup by associating with China. And, fourth, economic growth does have direct impact on the power relationships of nation states. Energy security makes China's economy a vibrant one, which in turn, helps modernising its military that eventually influences the power relationship with other great powers.

China's Energy Mix

Given the high rate of economic growth of 6–7 per cent consistently, China's primary energy demand has been increased significantly. At the same time China's energy structure is expected to see a progressive shift away from coal to other sources. The share of coal in primary energy demand will decline from 71.5 per cent in 2004 to 52.3 per cent by 2030.²⁴ In contrast, the oil share will rise from 22.4 per cent to 28.9 per cent: natural gas will rise from 3.0 per cent to 8.3 per cent, nuclear power from 0.9 per cent to 3.0 per cent, hydro from 2.2 to 2.4 and other renewable energy from 0.5 per cent to 5.1 per cent.²⁵

Ever since President Hu Jintao assumed office in 2003, energy security has been given one of the thrust area in his overall policy framework. In the 11th Five-Year plan for 2006–2011, the government targeted an average annual economic growth of 7.5 per cent and was aimed to improve energy consumption per unit of GDP by 20 per cent in the five years from 2006 through 2010. In the medium-to-long term, by 2020 the government plans to quadruple its GDP from 2000 and to improve energy consumption per unit GDP by 43 per cent compared with 2002.²⁶ However, China has to go a long way in achieving such goals and to ensure sustained flow of energy to consume at this level.

By the mid 1990s, China had moved from being a minor and largely self-sufficient energy consumer to become the world's fastest growing energy consumer and a significant player in the global energy market. Until then China's energy

demand was met by domestic sources, so impact on global market was minimal. In 1993 China's oil production and consumption was approximately 3mb/d. However, its production increased slightly, reaching just 3.7mb/d in 2008, while consumption has doubled during the same period. This change has created security oriented action plan in the supply system of its energy security scenario. The Chinese elites have placed uninterrupted source and supply of energy as a major factor in the comprehensive national power capability. Concretely, the potential vulnerability in the energy security scenario is not the concern in the balance between energy supply and demand, but sustained supply and affordable price mechanism is an important issue of China's energy security calculus.

China's oil demand was at 7.9 mb/d²⁷ in 2008, while its domestic production of oil was pegged at 3.7 million barrels per day(mb/d) during the same period (see Fig. 1). China's oil demand projection for 2020 varies from 10 million to 13.6 mb/d according to different agencies because of different assumptions about the growth rate of China's GDP and the income elasticity of demand (see Table 1), while China's domestic production in 2020 will be around 4mb/d by different agencies (see Table 2). As a result China will have to import around 2/3 of its total oil consumption by 2020.

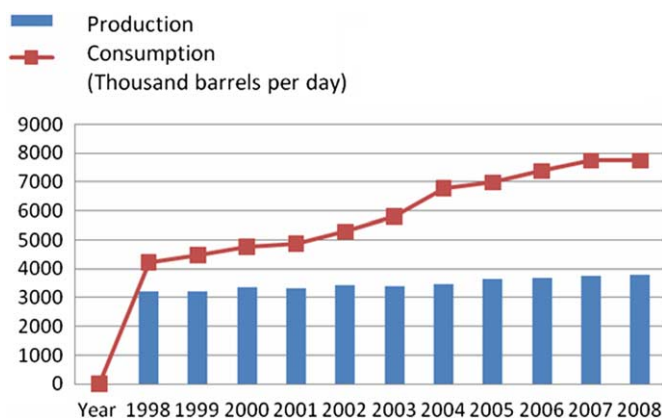


Fig. 1. China's crude oil consumption and production data in 2008 (source: BP, *BP Statistical Review of World Energy June 2009* (London: BP, 2009), pp. 9, 11, http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2008/STAGING/local_assets/2009_downloads/statistical_review_of_world_energy_full_report_2009.pdf (accessed January 14, 2011)).

Table 1. Projections of China's Oil Demand in 2020 (million barrels per day)

Source	Date	Projection
United States Energy Information Administration	2006	11.7
National Development and Reform Commission (China)	2006	10–12
China National Petroleum Corporation	2006	10.0
Institute for Energy Economics, Japan	2005	11.8
International Monetary Fund	2005	13.6
Energy Research Institute (China)	2005	13.0
International Energy Agency	2005	11.2
National Administration of Statistics (China)	2004	12.7

Source: "Brookings Foreign Policy Studies Energy Security Series: China", The Brookings Institution, Washington DC, 2006, p. 9.

However, the proven reservoir of hydrocarbon resources in China will not be able to meet the projected demand by any yardstick. In fact, the actual reserves of oil and gas in China have not been calculated conclusively and the figures provided by the Chinese government are suspected to be artificially high to attract foreign investment. On the other hand, the estimates given by the international oil companies may be artificially low keeping in view of maximum economic advantage for them. Scattered evidence suggests that it could be around 68 billion barrels of total proven and potential reserves.²⁸ This estimate includes 39 bb for onshore reserves and 29 bb for offshore reserves, divided between the East China Sea (12bb), the South China Sea (8bb), the Yellow Sea (4.5bb), and Bohai Sea (4.5bb).²⁹ However, according to

Table 2. Projections of China's Oil Supply in 2020 (million barrels per day)

Source	Date	Projection
United States Energy Information Administration	2006	3.8
China National Petroleum Corporation	2006	4.0
Institute for Energy Economics, Japan	2005	3.8
International Energy Agency	2005	3.0
Energy Research Institute (China)	2005	4.0

Source: "Brookings Foreign Policy Studies Energy Security Series: China", The Brookings Institution, Washington DC, 2006, p. 10.

British Petroleum statistics from June 2009 China's proven oil reserves is 15.5 billion barrels, which constitute just 1.2 per cent of the world total for a country which consume 9.6 per cent of world's total energy.³⁰

Although promising reserves of oil and gas have been found in the offshore of East and South China Seas, territorial disputes over maritime domain in these regions remains a stumbling block for extracting hydrocarbons domestically. China has a lingering territorial dispute with Japan in the East China Sea region over a group of uninhabited islets and rocks called Senkaku/Diaoyu. According to estimates based on geological surveys, they are believed to contain 80–100 billion barrels of oil reserves; however, no test wells have actually been drilled because of dispute between China and Japan.³¹ Similarly, China has territorial disputes with Southeast Asian countries over the resource rich Spratly islands in the South China Sea. These two maritime disputes of hydrocarbon rich areas are not for the energy security per se but it has strategic and political dimensions too.

Oil is likely to be in strong demand in the years to come. Petroleum products are the main source of fuel for China's road, air, rail, and sea transportation systems, which are among the fastest growing components of the booming economy. To put this in perspective, China had only 14.5 million registered motor vehicles on the road in 2001, while by 2030, this number is expected to jump to 130 million.³² The country is also building about 3000 miles of highway every year to make room for all the additional vehicles. Similarly, air traffic is also increasing dramatically.

China's crude oil import in 2009 was 203,786,208 thousand barrels of oil per day, of which 48 per cent came from the Middle East, 30 per cent from Africa, and 8 per cent from Russia (see Fig. 2). In 2005, this figure was of Middle East 46 per cent, of Africa 31 per cent, of Asia Pacific 8 per cent and Americas 3 per cent. Although China diversified its supply to various regions during this period, its dependence on the Middle East has increased and will continue to remain so because of the regions large reserve, and the Gulf countries are significantly wooing the Chinese elite for more crude oil from them since their dependence on West particularly the US is decreasing. In 2009 Saudi Arabia continued as the largest supplier of crude oil to China with 21 per cent from 18 per cent in 2005 followed by Angola-16 per cent from 14 per cent in 2005 and Iran 11 per cent decreased from 13 per cent in 2005 (see Fig. 3). Importantly China's dependence on Iran has been decreasing over the past few years.

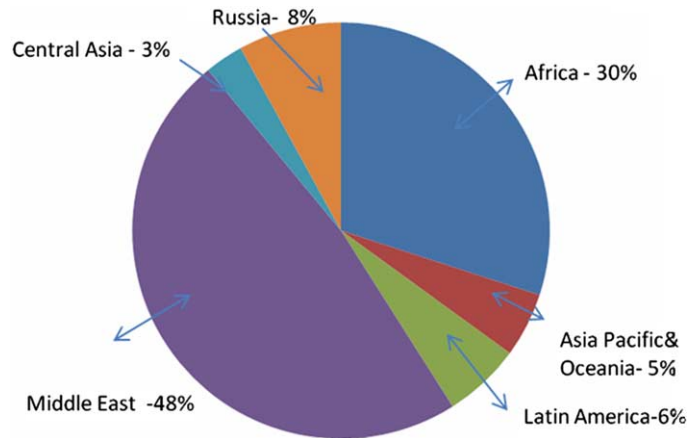


Fig. 2. China's crude oil imports by region in 2008 (total 203,786,208 tonnes) (source: www.chinaoilweb.com).

China's Energy Security Calculus

Resource diplomacy today has become one of the important aspects of China's foreign relations especially with regard to resource rich but underdeveloped countries. Given the increasing demand for oil and gas for China's steady economic growth, China is aggressively pursuing an energy security policy. China's reliance on external

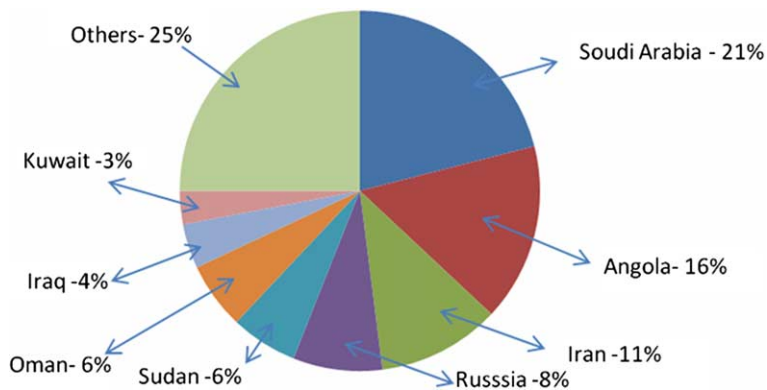


Fig. 3. Top 8 suppliers of crude oil in 2009 (source: www.chinaoilweb.com).

resources has made energy security central to the survival of the country. Therefore is an important matter on the comprehensive national security agenda.

China believes that control of natural resources as well as security of transport routes is critical to its long-term energy security. China has sought to invest in energy related assets overseas including purchase of equity oil. It focuses on long-term agreements with developing countries – most often countries like Sudan and Iran which are shunned by the oil companies from the West. China has also made huge investment in African countries such as Angola, Nigeria and Libya, and the investment is sometimes made through offset arrangements like free infrastructure and preferential trade deals, while in some cases it is acquired through participating in international bidding.

China's 2007 White Paper on Energy stipulates that China has to involve itself actively in international energy trade and must utilise foreign energy resources for its national goal.³³ Beijing's present calculation of seeking energy resources abroad is based on a well orchestrated "leapfrog" strategy. In 2003 November, the powerful National State Council issued broad outlines of a new energy policy through 2020 that called for a "leapfrog strategy in the energy field" and aimed to ensure energy security which include securing more supplies abroad and dramatic increase in the usage of gas, hydro-generators and nuclear reactors at home.³⁴

China's decision to invest abroad to secure new supplies of natural resources started initially in the Southeast Asian region, particularly Indonesia, the largest oil producing nation in the region, as part of former Chinese Prime Minister Zhu Rongji's "going out strategy".³⁵ In 2002, Chinese oil companies snapped up lucrative oil and gas fields in Indonesia,³⁶ which warmed the ties between Beijing and Jakarta that had soured in the aftermath of the aborted communist coup of 1965. This energy deal effectively marked China's coming of age as an economic power in Southeast Asia. This deal was followed by a flurry of activity by the national oil companies that helped to increase Chinese political clout in the region leaving behind an era when Japan and the US were the main engines of economic growth. Beijing has also invested heavily in Africa. China's search for energy supplies from Africa is revealing that it is sidestepping the American dominance and is working to harness the under-exploited energy potential of the region.

China aims to control the energy assets and pipelines from the countries with which China shares a land border as an instrument of its diplomacy. China's energy

security calculations and the activities of the national oil companies (NOCs) abroad have an attendant influence on non-energy foreign policy issues also. Chinese investment in the energy sector of reclusive regimes entrenches and consolidates such regimes. An obvious case is Iran, as China – Iran's largest trading partner, with considerable investment in Tehran's hydrocarbon sector – has many times showed reluctance to cooperate with international initiatives essential to halt Tehran's alleged nuclear weapons program.

Similarly, China is the largest foreign investor in Sudan's oil sector and its stand towards Sudan government's genocide in Darfur is cynical. As a UNSC member it can help the world's efforts to halt the genocide if it takes a strong position on human rights violations, but its energy security interests as well as its domestic compulsion prevents it from taking such a stand. Beijing's successful efforts to facilitate investment in the hydrocarbon sector by Chinese NOCs in Angola and billions of dollars of loans for various developmental activities with generous terms have effectively undercut the efforts by the IMF to pursue Angola for greater transparency about how it spends its oil revenues. Moreover, China's strong bond with other energy producers of dubious repute, particularly Myanmar, could provide a hedge against external, particularly Western pressure to halt internal suppression.

Ever since Hu Jintao assumed power in 2003, the Chinese government began to provide financial, diplomatic and even military support to the NOCs investing abroad. Energy diplomacy has become a hallmark of Hu's foreign policy to the countries of Africa and West Asia. In his first official visit to the US in 2006 he also toured the resource rich countries of Saudi Arabia, Morocco, Nigeria and Kenya as part of his five nation tour. The Chinese government helps the NOCs in acquiring assets of some specific projects which, in turn, help in cultivating friendly relations with the governments of oil producing states.

Financial Support to Oil Producing Countries

China has provided direct and indirect financial support to Chinese NOCs through loans – sometimes at below market rates – and through the provision of infrastructure investment and aid to governments of oil producing countries. The Export-Import Bank of China (Exim Bank) and China Development Bank play a crucial role in this regard. In 2004, the National Development and Reforms

Commission (NDRC) and China's Exim bank announced that the bank could provide credit on preferential loans to Chinese companies for "state-encouraged key overseas investment projects" including natural resource development.³⁷ Chinese company CNOOC received a "preferential" loan of \$1.6 billion for its Nigerian operation and got assurance from Exim bank for its unsuccessful bid for US energy major Unocol in 2005. Apart from banks, the state owned Assets Supervision Administration Commission (SASAC), which ranks equally with the Ministry of Foreign Affairs and Ministry of Commerce has a branch office in Africa. SASAC provides logistical support to both state owned enterprises (oil and non oil), and private companies of whatever requirements they need from the local governments in implementing projects.³⁸

China also provides bilateral financial aid as loans to the government of oil producing states for oil deals which include the construction of basic infrastructure by Chinese firms. The financial aid and investment has benefited Chinese oil companies significantly by convincing the local government and people that China can play a positive role in their country's economic development. Certain oil producers, notably Nigeria and Angola, have indicated that they will give preference to foreign oil companies which can offer attractive economic packages. In 2004, China's Exim bank extended a credit of \$2 billion to the Angolan government – at the extraordinarily generous rate of 1.5 per cent interest over seventeen years – to finance infrastructure construction by Chinese companies.³⁹

According to US Energy Information Administration statistics, China has provided \$50 billion loans to African countries which is equal to 70 per cent of the total investment by the three major NOCs since 2008.⁴⁰ The success of China's oil-for-loans diplomacy can be seen in Luanda's preference for Chinese company Sinopec over the Indian firm ONGC Videsh which had originally won the bid of Royal Dutch-Shell's stake in Block 18 in 2004.⁴¹

Political Support

Politically, government support to China's NOCs has come through the summit meeting between Chinese leaders and their counterparts from oil producing states, in which agreements on oil projects have been concluded. China and African countries have formed a Forum on China-Africa Cooperation (FACAC) in 2000, for which

one summit and four ministerial conferences have been so far held successfully. In the 2006 summit in Beijing, 48 African leaders participated and signed agreements on various energy deals that provided Chinese NOCs more business opportunities in these countries.⁴² From 2006–2008, Chinese President and Premier visited Africa three times, travelling to 17 countries. In his 2009 five nation tour Hu visited Saudi Arabia, Mauritius, Mali, Senegal and Tanzania, and promised China's financial support to these countries to recover from the financial crisis and sought to achieve complete trustworthy and all-weather friendly relationship with them.

Military Support

China has built better bilateral relations with some African leaders by selling arms to them, which could enhance Chinese access to oil and natural resources. China sold the Sudanese government weapons and helicopters that were used in Darfur to suppress the local people, and which was called “dragon in the bush” by the political commentators.⁴³ Similarly, China has made some progress in its relationship with those countries whose natural resource export predominantly goes to Europe by providing military support to them. For instance, Algeria, the world's 18th largest producer of crude oil and fourth largest producer in Africa, but which exports well over 90 per cent of its high quality, low sulfur sweet crude to the Western Europe.⁴⁴ To garner considerable leverage in the country, China has provided training to Algerian military officers and high level exchanges between the two countries occur regularly. China is also selling arms to Algeria, and Algeria was the first country in Africa to import China's C-85 (Project 802) missile boats fitted with C-802 ship-to-ship missiles and 5,550 ton training ship.⁴⁵ China's earlier involvement in the Algerian oil industry was marginal with few investments in exploration and future development projects. More recently, China has made great inroads into the Algerian oil sector especially after Hu Jintao's visit to Algiers in 2004; important among them are \$350 million investment for a refinery in Adrar, and a \$525 million investment in the Zarzaitine oil field in southeastern Algeria. Recently, Algeria's Energy Ministry awarded the CNOOC an exploration license of Hassi Bir Rekaiz bloc.⁴⁶

China has emerged as the major suppliers of arms to the African countries in recent times. From 2000 to 2003, China delivered by value about 13 per cent of all arms to Sub-Saharan Africa, the second highest provider after Russia – 16 per cent.⁴⁷

From 2004 to 2007, China's percentage increased to almost 18 per cent, although it remained in second place after Germany's 24 per cent.⁴⁸

Threats to China's Energy Security

Broadly speaking, there are two factors that can threaten energy security of China: (1) events that have global impact and (2) events that impact a specific country or region.⁴⁹ Events that have global impact are of concern for all oil importing countries, such as steep hike in oil prices, OPEC's policy decision on output levels, and embargo disruptions, i.e. embargo by importers of a specific exporting state. Events that impact specific countries or regions have the potential to cause much more damage to an importing country's energy supply than global events. Of this, area specific events like physical disruption in the energy trade route either by terrorist activities or a blockade by enemy power would severely affect its energy security calculations. In this physical disruption component China has identified three locations in the maritime sector, namely: Hormuz Strait, Malacca Strait and Horn of Africa – all the three in the Indian Ocean region.

The Hormuz Strait Dilemma

China anticipates that a possible military strike against Iran by the US because of its alleged nuclear weapons program would probably be met with an effort to choke off the oil shipments through the Hormuz Strait. Iran has already hinted that if attacked, it would immediately close the Strait of Hormuz, a strategic choke point nestled between the Gulf of Oman and the Persian Gulf. At present around one third of China-bound oil flows through the Strait and Chinese dependence on this region will increase as West Asia holds the largest energy reservoir of both oil and gas in the world. Given the importance of the Hormuz Strait in ensuring energy security China is helping Pakistan build its Gwadar Port, which China can utilise for military as well as commercial purposes.

At the moment, it seems unlikely that China would involve itself directly in any sort of US-Iran showdown and there is a stream of thought in Iran that China would not be able to use its veto power against Tehran at the UNSC. In a way, China will not be able to protect its assets and interests in the region by direct involvement in the crisis. In this regard China's strategy is to minimise the damages. In this scenario

Beijing is reducing its dependency on Iran's oil and is searching for an alternative land route through Saudi Arabia and the UAE, and has also evinced its interest in participating in the Iran-Pakistan-India peace pipeline. In 2006, Beijing basically accepted Saudi Arabia's offer to supply as much as oil China consumes from Iran in case of a sanctions or use of force against Iran.⁵⁰ In early 2007 the China Petroleum Engineering and Construction Corporation (CPEC) signed an agreement with Abu Dhabi's International Petroleum Investment Company to build a pipeline that would bypass the Strait of Hormuz. The project involves the construction of a 360 km long 48 inch diameter pipeline with capacity of 1.5 mb/d crude oil from Habshan west of the Strait to al-Fujayrah east of the Strait, crossing UAE and Abu Dhabi.⁵¹ However, it can never be a substitute for the sea route as the total volume of crude oil that passes through the strait is 17 mb/d. China might avoid an attack on Iran by using all sorts of methods, but if an attack happens China will ensure that the conflict is as brief as possible and ends as soon as possible. China hopes that a brief and focused attack will lessen the casualties on its energy interest, while a longer and larger conflict means greater disruption and instability in the entire region as China's dependency on Gulf oil will increase substantially in the years to come.

The Malacca Dilemma

The Chinese perceive that the narrow stretch of Malacca Strait through which a good portion of oil from the Middle East and Africa bound for China could be interdicted by enemy naval forces. This concern was echoed in 2003, when President Hu Jintao declared that "certain major powers were bent on controlling the strait, and called for the adoption of new strategies to mitigate the perceived vulnerability".⁵² Since then Chinese officials and media began to portray the Malacca dilemma as a pertinent security concern for China. According to the *China Brief* daily, "it is no exaggeration to say that whoever controls the strait of Malacca will also have a stranglehold on the energy route".⁵³

Keeping this in view, China has focused to strengthen its activity in the west coast of Southeast Asia and identified Myanmar as a focal point in providing security of the SLOC. China already had a naval listening point in the Coco Island of Myanmar from where it can monitor communication of various naval activity in the adjacent

area of Indian Ocean region. China has provided financial and logistical support to construct Sittawee port of Myanmar. Of late, however, the Malacca dilemma has lost its relevance and China has reduced its naval activity in the Bay of Bengal largely due to two reasons. First, the anticipated threat perception by hostile naval forces in the Malacca Strait has been reduced because the littoral countries of Singapore, Malaysia and Indonesia would not allow its waters to augment such kind of naval activity; they don't even allow a foreign navy, whether Chinese or Indian or US, to participate in the patrolling activity in the Strait against piracy and terrorism. Second, India has strengthened its military facility in the Andaman and Nicobar island and converted the naval base as a tri-service strategic defence command (SDC) which can cause serious damage to Chinese naval facility off the Myanmar coast. So China's strategy vis-a-vis the Malacca dilemma is now to strengthen cooperation with the littoral navies, including Indian navy.

The Horn of Africa

China's policy towards the Horn of Africa is a combination of fighting against piracy to ensure security of the SLOC and working to get a legitimate role in the security architecture of the Indian Ocean region. In spite of not being a littoral country in the Indian Ocean region, China is commanding more influence in the region in recent times. China traditionally pursues a defence doctrine for PLAN of concentrating on defending Chinese coastal waters and on preventing US military intervention in any Taiwan contingency. But now China is actively involved in the anti-piracy operation at the Horn of Africa. In response to continued attacks on ships which carry the Chinese flag, China has sent four task forces, consisting of three warships, typically frigates, along with a larger supply ship and hundreds of sailors and special force troops to the African coast.⁵⁴ In November 2009, Liang Wei, the deputy chief of operations of the PLAN's South Fleet, said that the four Chinese flotillas had escorted or protected approximately 1,100 commercial vessels from potential pirate attacks.⁵⁵ However, it is reported that none of the warships on patrol thus far appear to have engaged in large-scale combat with the pirates, raising the interesting question of what then is the actual mission or the rule of engagement followed by the Chinese flotillas.⁵⁶

With regard to the multilateral patrolling in the African coast, China had expressed its willingness to integrate its operations more closely with other navies on the mission with more of a leadership role than just taking orders from a central command operating in the region. Further, China favoured rotating the co-chairmanship of the Shared Awareness and De-Confliction (SHADE) group – a group of representatives of some three dozen navies currently participating in the maritime counter-piracy mission of Somalia coast – among the other participating navies so that China could have a leadership role in it.

After receiving support from the EU and with the tactical silence of the USA, China is now all set to lead SHADE's anti-piracy patrol in the Somalian waters. Lately, the Chinese government has put forward an idea of a division of the sea-lanes currently being patrolled into separate national sectors.⁵⁷ A senior Chinese defence official echoed this sentiment and said the counter-piracy operations off Somalia must have a "consensus" on arrangements for defining specific national patrol areas. Similarly, China's deputy permanent representative to the UN, Liu Zhenmin proposed at the UNSC that the navies engaged in the counter-piracy mission should "define" areas of responsibility. If granted, this mechanism would benefit China that it would get a "sovereign" area for naval operations in the Indian Ocean waters, far away from its coast.

China desires a permanent presence in the Indian Ocean that would exalt its power projection capability in the region, and give a boost to its ambition to become a true global power as it does not have greater influence beyond the immediate shoreline of China. In fact, energy needs made it more convenient for Beijing to cast anxious eyes on the sea-lanes of communication and the security of waterways stretching from China's coastlines to the Indian Ocean.⁵⁸ Under the rubric of protecting its energy trade route and anti-piracy operation, China might seek a naval base in the Indian Ocean, possibly in the western part of the India Ocean. Experts like Professor Shen Dingli of Fudan University argue that China should think about establishing a military base overseas as other countries use their overseas military base to protect their overseas rights and interests which never prohibit international law and convention.⁵⁹ Similarly, PLAN's Admiral Yin Zhuo proposed that China should set up a permanent base in the Indian Ocean to serve the anti-piracy operation including refuel and re-supply.⁶⁰ In a way, if China gets a naval base in the Indian

Ocean region under the rubric of energy security, that will provide a greater security threat to India in due course of time.

Conclusion

China will continue its dependence on the Middle East for oil for at least the next two decades, even though it imports more oil from Africa and Latin America. This is largely because the Middle East has the largest hydrocarbon reserves in the region; secondly, for Gulf countries particularly Saudi Arabia, China is a huge market – while its export to USA might decrease since USA is focusing to increase its domestic oil output. Under such circumstances China's dependence on maritime routes, especially the Indian Ocean is crucial.

China has increased its naval activity in the Indian Ocean region in recent times under the rubric of energy security. Its long-term aim is to have a permanent presence in the littoral waters by establishing a military base in the region. Thus, China's quest for energy security should be conceptualised within its grand strategy for achievement of super power status.

Notes

1. *World Energy Outlook 2007: India and China Insights* (Vienna: International Energy Agency, 2008), p. 160.
2. *Ibid.*, p. 161.
3. *BP Statistical Review of World Energy June 2009* (London: British Petroleum, 2009), pp. 6–20.
4. National Energy Policy Development Group, "Reliable, Affordable, and Environmentally Sound Energy for America's Future", Report, Office of the Vice President, Government of the United States: Washington DC, 2001, <http://www.wtrg.com/EnergyReport/National-Energy-Policy.pdf> (accessed February 20, 2010).
5. Ministry of Economy, Trade and Industry, "New National Energy Strategy", Government of Japan: Tokyo, <http://www.enecho.meti.go.jp/english/report/newnationalenergystategy2006.pdf> (accessed February 12, 2010).
6. State Council Information Office, "White Paper on Energy: China's Energy Condition and Policy", Government of the People's Republic of China: Beijing, December 2007, p. 2, <http://www.china.org.cn/english/environment/236955.htm> (accessed January 28, 2010).
7. *Ibid.*, p. 6.

8. Chen Fengying and Ni Jiejun, "Asian Energy Security: The Role of China and India", *Strategic Analysis*, 32, no. 1 (January 2008): 45.
9. *Ibid.*
10. Energy Information Administration, "Energy Outlook 2005", Department of Energy, Government of the United States, Washington DC: Government Printing Office, 2006, p. 8.
11. *BP Statistical Review of World Energy June 2009*, p. 8.
12. Alastair Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in China's History* (Princeton, NJ: Princeton University Press, 1995).
13. Daniel Lynch, "Chinese Thinking on the Future of International Relations: Realism as the *Ti*, Rationalism as the *Yong*?", *The China Quarterly*, 197 (March 2009): 89.
14. Michael D. Swaine, *China: Domestic Change and Foreign Policy* (Santa Monica CA: RAND, 1995), and Andrew J. Nathan and Robert S. Ross, *The Great Wall and the Empty Fortress: China's Search for Security* (New York: W.W. Norton, 1997).
15. James Tang, "With the Grain or Against the Grain? Energy Security and Chinese Foreign Policy in the Hu Jintao Era", *Policy Paper October 2006*, Brookings Institution, p. 7, quoted from Pang Zhongyong, "*Heping Fazhan yu nengyuan waijiao*" [Peaceful Development and Energy Diplomacy], *Liaowang* [Outlook Weekly], 6–7, 2006.
16. Lynch, "Chinese Thinking", p. 96.
17. David Zweig and Bi Jianbai, "China's Global Hunt for Energy", *Foreign Affairs*, 84, no. 5 (2005): 25.
18. *Ibid.*, pp. 25–26.
19. Lynch, "Chinese Thinking", p. 100.
20. *Ibid.*
21. *Ibid.*, p. 101.
22. *Ibid.*
23. *Ibid.*
24. Li Zhodong, "China's Long-term Energy Outlook and the Implications for Global Governance", *Asia-Pacific Review*, 14, no. 1 (2007): 17.
25. *Ibid.*
26. *Ibid.*, p. 13.
27. *BP Statistical Review of World Energy*, pp. 8 and 11.
28. Erica Strecker Downs, *China's Quest for Energy Security* (Santa Monica, CA: RAND Monograph, 2000), p. 6.
29. *Ibid.*, p. 7
30. *Ibid.*
31. Joshy M. Paul, "Territorial Dispute in the East China Sea Region and its Effects on Japan-China Relations", *Maritime Affairs*, 4, no. 1 (Summer 2008): 116.

32. Michael T. Clark, "Facing the Dragon: China's Strategic Energy Dilemma", *Current History* (April 2009): 181.
33. White Paper on Energy, p. 21, <http://www.scribd.com/doc/22181409/China-s-outward-foreign-investment-from-a-political-perspective> (accessed February 3, 2011).
34. "Asia's Greatest Oil Hunt", *Business Week*, November 15, 2004, http://www.businessweek.com/magazine/content/04_46/b3908044.htm (accessed February 12, 2010).
35. "Buying Fast into Southeast Asia", *Far Eastern Economic Review*, March 28, 2002, p. 30.
36. In 2002, China's state owned offshore oil company CNOOC bought Indonesia's oil and gas assets in a Spanish oil company Rspol YPF for \$585 million, which was nine times the sum of all cumulative approved Chinese investment up to the end of 2000. See "Buying Fast into Southeast Asia", p. 31.
37. Erica Downs, "Brookings Foreign Policy Studies Energy Security Series: China", p. 41, <http://www.brookings.edu/reports/2006/12china.aspx> (accessed February, 3 2011).
38. David H. Shinn, "Africa: The United States and China Court the Continent" *Journal of International Affairs*, 62, no. 2 (Spring/Summer 2009): 43.
39. "China in Africa Digest 8–24 January", *BBC Monitoring, Africa: Political*, January 31, 2005.
40. Energy Information Administration, "China Energy Data, Statistics and Analysis-Oil Gas Electricity and Coal", Government of the United States: Washington, DC, 2010, p. 4.
41. "China Edges Out India for Angolan Prize After Political Move by State Sonangol", *International Oil Daily*, October 24, 2004.
42. "The Forum on China-Africa Cooperation and Its Significance for Namibia", Ministry of Foreign Affairs, People's Republic of China, <http://www.fmprc.gov.cn/eng/errorpath/t625459.htm> (accessed 10 March 2010).
43. Samuel J. Spiegel and Philille Le Billon, "China Weapons Trade: From Ships to the Ethics of Global Resistance", *International Affairs*, 85, no. 2 (2009): 323.
44. Chris Zambelis, "China's Inroads into North Africa: An Assessment of Sino-Algerian Relations", *China Brief*, X, no. 1 (2010): 10.
45. United Press International, December 31, 2008.
46. Zambelis, "China's Inroads into North Africa", p. 11.
47. David H. Shinn, "Chinese Involvement in African Conflict Zone", *China Brief*, IX, no. 7 (2009): 8.
48. *Ibid.*
49. Philip Andrews Speed, Xuan Li Loao and Roland Dannreuther, "Searching for Energy Security: The Political Ramifications of China's International Energy Policy", *China Environment Series*, Issue 5 (2003):16.
50. Yitzhak Shicho, "Blocking the Hormuz Strait: China Energy Dilemma", *China Brief*, 8, no. 18 (Sept 22, 2008).

51. *Ibid.*
52. Ian Storey, "China's 'Malacca' Dilemma", *China Brief*, 6, no. 8 (April 11, 2006).
53. *Ibid.*
54. Richard Weitz, "Priorities and Challenges in China's Naval Deployment in the Horn of Africa", *China Brief*, 9, no. 24 (December 3, 2009).
55. *Ibid.*
56. *Ibid.*
57. *Ibid.*
58. James R. Holmes, Andrew C. Winner and Toshi Yoshihara, *Indian Naval Strategy in the Twenty-first Century*, (New York: Routledge, 2009), p. 129.
59. Shen Dingli, "Don't Shun the Idea of Setting Up Overseas Military Bases", *China.org.cn*, January 28, 2010, http://www.china.org.cn/opinion/2010-01/28/content_19324522_3.htm, (accessed March 24, 2010).
60. "China May Build Middle East Naval Base", *The Telegraph*, December 30, 2009, <http://www.telegraph.co.uk/news/worldnews/asia/china/6911198/China-may-build-Middle-East-naval-base.html> (accessed February 3, 2011).