The Maritime Dimension of Energy Security

Rear Admiral Rakesh Chopra, VSM

> "By bolstering force levels and revising its doctrine, the Indian Navy hopes to emerge by 2015 as the 'best, largest and operationally most efficient force' in the Indian Ocean Region capable of countering distant, developing threats."
>
> Admiral Madhvendra Singh
> Former Chief of the Naval Staff[1]

The Maritime Dimension

The heady mixture of energy with terrorism makes the Indian Ocean Region (IOR) very combustible. The Persian Gulf with over two-thirds of the world's oil reserves and one-third of gas holds the key to global progress and stability. The smooth flow of energy is vital for economic prosperity. Tankers ship more than 100 million tonnes[2] of oil each day and with Asia's growing energy demand, this figure would soar in the future.

In Asia, China became a net importer of energy in 1993 and by 2020 with imports at 38 million barrels per day (mbd), would become the world's second major consumer after the US with 80 per cent sourced from the Persian Gulf through the Indian Ocean. Similarly, by 2020 India's annual demand for imported oil would grow at least four times from around 80 million tonnes presently to an estimated 320 million tonnes making it the world's fourth largest consumer.

An important strategic outcome from Asia's emerging energy profile is the security of sea lanes of communications (SLOCs) in the Indian Ocean and beyond. Around 50 tankers transit Indian

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ports daily; by 2020 this traffic would climb to between 150 and 200 substantially increasing the maritime pressure on the chokepoints and SLOCs. Any threats of interdiction by state or non-state actors would raise tensions, strain diplomatic relations and could lead to conflict. Apart from traffic density, there are also issues of piracy with overlays of maritime terrorism to be considered. Thus the safe transportation of oil and gas requires enhanced sea-lane defence capability, which adds the 'Maritime Dimension' to the already complex 'Energy Security' equations. On the other hand, this is an issue that could foster Asian regional co-operation promoting goodwill and harmony

The Indian Ocean is the most militarised water body in the world. Of the extra-regional navies, the US Navy is dominant, with Western ally navies operating in close concert in the North Arabian Sea supporting the ongoing operations in Afghanistan and Iraq. The Japanese Navy has broken its constitutional shackles and has, after World War II, deployed westwards to the Indian Ocean for the first time. The People's Liberation Army (PLA) Navy waits in the wings developing its sea legs and makes annual forays to show its flag.

Of the regional navies, the Indian Navy is the most balanced with the capacity to ensure security and stability of the IOR. But it has one glaring deficiency. It lacks a credible power projection capability to secure, if required, the sources of its energy. Next in importance is the Pakistan Navy but with minimal sea legs and a rudimentary sea denial capability. The Australians have deployed in the North Arabian Sea in support of the Americans but they otherwise remain focused on their northern waters and in the Pacific. The South African Navy has shrunk and located as it is in the southern antipodes, far away from the 'energy crescent' of the Middle East, exerts no credible influence. The remaining regional navies are coastal forces, little more than coast guards with negligible capability to influence events beyond their territorial waters. However, emerging regional maritime powers like Malaysia are investing resources to enhance maritime capabilities to increase optical presence and safeguard national interests.

India sits astride three 'choke points' for global energy supplies, the Strait of Hormuz and Bab al Mandab on its west and the Strait of Malacca to its east, with epicentres of terrorism as neighbours. In geopolitical terms, India is located at the crossroads of the outward flow to the rest of the world of both global energy supplies requiring protection and jihadi terrorism requiring countenance. India's proficient navy could assist in both tasks, either sailing independently to only safeguard India's national interests thus retaining flexibility in mission selection and operations or cooperatively forming a multilateral screen with other regional players to achieve collective energy security thus saving effort and costs.

Asian Energy Choke Points

Of the world's seven energy chokepoints, the closure of three chokepoints in the Indian Ocean[3] would be disastrous for world and Asian economies. This will require nearly half the world's tanker fleet to divert and sail further enhancing transit time creating a shortage in capacity thus adding to shipping costs. These are as under :-

(a) **The Strait of Hormuz.** Located between Oman's Mussamdam Peninsula and Iran, it connects the Arabian Sea and the Gulf of Oman to the Persian Gulf. With over 15.5 mbd of oil bound for all parts of the world passing through Hormuz, it is a strategic energy choke point.

(b) **Strait of Bab al Mandab.** Past Perim, Bab al Mandab connects the Arabian Sea and Gulf of Aden with the Red Sea linking with the Mediterranean through the Suez Canal. Between 3.2 to 3.5 mbd oil passes through this Strait bound for Western markets. With its closure, Persian Gulf tankers would not reach the Suez Canal and Summed pipeline necessitating diversion around Good Hope.

(c) **The Malacca Strait.** Between Sumatra, the west coast of Malaysia and Singapore, Malacca links the Indian Ocean with the South China Sea and the Pacific Ocean. It is on the shortest route to East Asia connecting three of the world's most populous nations, India, Indonesia and China. It is not very suitable for passage by super tankers and is plagued by

pirates. The Phillips Channel in the Singapore Strait is 1.5 metre wide and a natural bottleneck with the potential for collisions, groundings and oil spills. To avoid heavy traffic in Malacca, some ships divert through the Indonesian Sunda and Lombok Straits. In the year 2002, 3,500 and 3,900 ships passed through these two Straits respectively whilst 73,000 ships transited Malacca.

The New 'Silk Route' – Persian Gulf to East Asia

The most important Asian energy sea-lane is the contemporary 'Silk Route' of Persian Gulf- East Asia through Hormuz, past the Arabian Sea and Bay of Bengal and thence through the Strait of Malacca to the South China Sea. More than 50,000 tankers[4] transport 10.3 mbd of oil through the year, which includes almost 70 per cent of Japan's and 60 per cent of China's oil supplies. With Chinese imports from the Middle East increasing significantly, the volumes of oil and gas being shipped eastward is forecasted to increase substantially further increasing its economic and strategic importance.

In addition to the tankers (a nightmare for Japanese security planners), one-fourth of the world's maritime trade also transits through the Indonesian archipelago and the South China Sea which is a fertile hunting ground for ruthless pirates allegedly controlled by powerful Indonesian interests. Whilst the bulk of the liquified natural gas (LNG) investments in South East Asia are centred in these hydrocarbon rich archipelago waters, the potential availability of hydrocarbons in the South China Sea is also high. Major discoveries with potential for production could be catalysts for tensions in the region.

Another important concern is the conflicting claims of China and five other countries, Taiwan, the Philippines, Brunei, Vietnam and Malaysia, over the disputed Spratly and Paracel Islands. Military force has been used to enforce national claims and may well be employed again. Similarly, Indonesia asserts that the Natuna gas field, the world's single largest with procrastinated reserves of 40 to 45 trillion cubic feet (tcf) of methane, lies within its territorial waters which China disputes.

Piracy in Asian Waters

The International Maritime Bureau's (IMB) *Annual Report* highlights that in 2002 acts of armed piracy, with weapons, rose by 3.6 per cent worldwide becoming better organised, complex and more heinous with crewmembers injured or killed. However, international crime syndicate backed ship hijackings involving seizures and subsequent sale of ships decreased.

Nearly 50 per cent of the total reported incidents of piracy had occurred in five 'vulnerable' territorial seas and archipelagic waters. The Indonesian archipelago continued to be the most hazardous. Attacks in the Malacca Strait were down marginally. The Southern Red Sea and waters off India and Bangladesh were classified as dangerous. However, the report added that increased offshore patrols by South Asian countries had reduced the dangers reinforcing that SLOC patrol would remain the primary peacetime mission of maritime forces.

There are difficulties in policing and enforcing laws in waters where several countries' territorial seas are adjoined with overlapping jurisdiction. These crimes cannot be tried in courts under the definition of 'piracy' in the UN Convention of the Law of the Sea (UNCLOS). There is a need for an international structure to ensure that criminals perpetrating crime against the safety of maritime navigation are not permitted to evade natural justice.

Reasons for piracy in the region include hydrographical conditions (e.g. ships forced to navigate at slow speeds in choke points and shallow restricted waters), general political instability and poor governance, poverty reinforced by economic stagnation and the diminishing optical presence of the major and regional navies.

Terrorism at Sea

In September 2002, the US Navy had issued a warning of possible attacks on oil tankers in Gulf waters by Al Qaeda. However, the importance and full dimensions of sea-lane security was brought home on 6 October 2002 when a French super tanker, the *Linburg*, was attacked by an approaching boat off the port of

Mina al-Dabah in the Gulf of Aden blowing a hole in the side[5]. It was reminiscent of a similar attack in October 2000 by suicide bombers on the USS *Cole* in the Yemeni port of Aden in which 17 US sailors died. Within hours, the price of oil surged on the international markets.

Following the attack, the US issued a statement that despite its overwhelming presence in the region, it had no plans to step up patrols highlighting that the responsibility for protection and safety at sea clearly devolves upon the flag country of the vessel unless a friendly navy offers its services for constabulary duties and protection.

This raises questions on the measures that need to be adopted to combat continuing nexus of piracy and terrorism at sea to ensure the safe transportation of energy over the SLOCs.

Power Projection and the Indian Navy

India's economic liberalisation and globalisation have resulted in the brisk growth in energy consumption increasing vulnerabilities. With stagnating domestic production, rapidly escalating imports has led to greater dependencies on foreign oil and gas sources posing new security challenges. The criticality of imported energy would alter defence-planning focus from the existing task of static peripheral border management to dynamic energy security and the acquisition of a credible power projection capability to inject expeditionary forces to safeguard critical sources of energy and provide security during embarkation.

India is a major maritime power in the Indian Ocean. The Indian Navy has a responsibility to the global community to patrol the choke points and SLOCs to secure shipping from piracy, terrorism and other threats. President Bush in his 1 June 2002 West Point military academy speech, highlighted the importance of this mission, "...we have a common interest with India in the free flow of commerce, including through the vital sea-lanes of the Indian Ocean..."[6]. The Indian Navy exercises with other navies regularly with joint patrols in the Malacca Strait and other vulnerable areas. Following the *Allondra Rainbow* incident, the Japanese, requested India for SLOC security on a mutual reciprocal basis

with the Japanese Navy providing protection to Indian shipping in East Asia and the South China Sea.

India also has its own security concerns. Notwithstanding its pre-occupation with its land borders, it must factor into its security framework capabilities of state and non-state actors to interdict Indian energy SLOCs in the North Arabian Sea from Hormuz to the west coast tanker ports. A major mission of the Indian Navy is sea-lane defence and the neutralisation of inimical capabilities to protect its energy supplies. The entrance to the Gulf of Kutch, is a choke point. The approaches to the important ports of Kandla, Salaya and Vadinar are also vulnerable. These ports service the giant Reliance and Essar refineries and the major consumption regions of North India.

From the Indian security viewpoint, another issue that requires attention is the availability of tanker tonnage during periods of tension and conflict. Hitherto, the Indian Oil Corporation (IOC) was monopolistically tasked with energy imports negotiations, transportation and distribution along the coasts. The tankers were chartered from the Shipping Corporation of India (SCI) and other Indian companies. Privatisation could impinge on national security if tanker tonnage under the Indian flag reduces considerably. The concept of the US Reserve Fleet to maintain a reserve tonnage could serve India's strategic ends.

Most Asian countries view India as a partner for economic progress and regional security. They welcome an economically resurgent India playing a cooperative role in promoting bilateral and regional economic integration and meeting the challenges posed to security and stability across the IOR. A responsible future lies ahead.

In Cheng Ho's Footsteps- China's SLOC Strategy

Today, with grand strategic goals, self-confident China is rapidly filling the vacuum created by the collapse of the former Soviet Union. Facing multiple challenges, it has consolidated its ideological, economic and military power, aggregated its control over its territories and adopting aggressive measures has

established spheres of influence. To shape its future, its actions would be dictated by its national resolve to exploit the 'strategic configurations of power' by being politically stable, economically dynamic and militarily strong.

China follows combinations of continental and maritime strategies.[7] It is forging security arrangements to contain extra-regional influence in its strategic space and creating dependencies by strengthening diplomatic relations and military ties with large investments in its extended neighbourhood and beyond. It is building infrastructure links to neighbouring countries, highways, railroads and waterways. It is opening its borders giving access to its vast markets to facilitate trade.

China with its vibrant economy looms very large in the Asian energy future calculus. The further one gazes the larger China's requirements grow. With plateaued indigenous production and doubling of oil consumption by 2015, the current imports of roughly 30 per cent would increase to 60 per cent of total consumption. This incremental increase would match Japan's current imports, which equals Iran's total oil production, Iran being the world's fourth largest oil producer. By 2020 Chinese imports would climb an additional 20 per cent.

Notwithstanding equity oil investments in various regions, nearly all imports would be sourced from the Persian Gulf increasing dependency on this volatile region bringing it into competition with the western powers, India and Japan. Therefore, it is not surprising that China's diplomatic and economic engagement in the Gulf has been growing at a fast pace. By continuing its 'long march' unabated, China intends to exert strong influence in the Middle East for its energy needs augmented by its peripheral regions, Central Asian Republics (CAR) and the Russian Far East. Its near total dependence on Persian Gulf energy exposes its Achille's heel, its vital energy SLOCs in the IOR. Their security would be one of the major missions of the People's Liberation Army (PLA) Navy.

Shortly after China became a net importer of oil in 1993, Zhao Nanqi, the Director of the Chinese Navy General Staff Logistics Department proclaimed, 'We can no longer accept the Indian Ocean

as an ocean only of the Indians,'[8] signalling the maritime dimension of its energy security. It is only a matter of time before the Chinese Navy, emulating the illustrious Admiral Cheng Ho[9], adopts a 'creeping maritime strategy' and establishes itself in the Indian Ocean. With an innocuous 'incremental advance', it would progressively extend its influence from its contiguous waters to the Gulf through its presence in Myanmar and Pakistan.

Presently the PLA Navy does not have the capability to project significant maritime power or launch an interventionist operation. It is stymied by the dominating regional presence of the US Navy augmented by the checkmate of the Indian Navy commencing with its advanced station in the Andaman Sea facing the choke point of the Malacca Strait. Nonetheless, the PLA Navy has embarked on an ambitious modernisation programme aimed at extending its maritime defence perimeter further into the 'blue waters' adopting the strategy of 'tao guang yang hui' (conceal one's talent, arouse minimum concern and suspicion) in the maritime theatre to have the capacity to absorb counter reactions and wait for the moment.

Conclusion

Historically, the Royal Indian Navy was raised as a constabulary force to control the Persian Gulf and guard the Western approaches for the security of India. The Indian Navy today has tacked to 'the blue waters' and seeks a dominating role in the Indian Ocean. However, geopolitical compulsions of energy security to power a modern developed India may once again compel the Navy to focus to its historical role.

By 2020, forecasts peg India's demand of oil at 320 million tonnes per annum with China's at least twice that figure. At current global consumption rates, the Persian Gulf region may be the only remaining source of any significant quantity of energy and its production would, more or less, equal the demand of the West and they would loath to share this vital energy resource with India and China.

This basic geostrategic and economic reality conjures up various vistas and scenarios. The navies of the USA and the UK would remain in the Persian Gulf and the eastern Mediterranean

indefinitely to shanghai all the available oil for themselves from the Middle East. India may not be able to source its requirements from the Gulf unless it has the military capability with the will to use it to support its demand. It remains to be seen what China would do. In this confrontational context, the problems of piracy on the high seas would pale into insignificance.

Other obverse scenarios could factor in the downsizing of the US military and naval presence or even the withdrawal of its forces from the region because of 'strategic overreach', 'Arab fatigue', 'financial overspend' and so on. The PLA Navy could attempt to fill the vacuum requiring a suitable Indian response.

Energy security, missiles, nuclear proliferation and terrorism are issues that would dominate the geopolitics of IOR in the coming years. India is advantageously located on the sea-lanes of energy flows but faces the flow of terrorism from its western neighbourhood. It cannot address these challenges by resorting to old strategic mantras and clichés. It is time for India to have a clear vision and a comprehensive doctrine for the future to protect its national interests and to promote peace, security and cooperation in this volatile but vital region. Otherwise it may find itself marginalised in the Indian Ocean neighbourhood. This could be a wake up call for regional maritime security planners.

Notes and References

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9. Illustrious Chinese Admiral who led an expedition to the Indian Ocean in the 14th Century visiting Cochin and Calicut apart from other lucrative trading ports.