

THE INDIAN OCEAN – FUTURE THREATS AND CONCERNS

INTRODUCTION

Good Afternoon Ladies and Gentlemen,

1. It is with immense pleasure I take this opportunity to address this august gathering. Indeed it's an honour and I feel privileged to be here. Commander of the Navy, sir, thank you so much for giving me this opportunity.

2. Indian Ocean, you have been seeing this area since the beginning of this conference. Let me again show you a picture of this area. This third largest water body as demarcated by human connects 36 nation states directly, we could even make it to 38 if we consider France and the UK; and is also the great connector for all of us in the IOR to the rest of the world.

3. In addition to the beauty that this region has, it is the key strategic arena in the 21st century. One reason is the growth of the Asian economies and their increased need for raw materials, including energy from the Middle East. We have also witnessed an increasing flow of Asian labour, capital, and consumer goods, particularly to the rich countries of the Arabian Peninsula. Combined with that, the end of the Cold War and ongoing crises in western Asia has increased the importance of Indian Ocean and the western Pacific Ocean over the Atlantic Ocean.

4. But my topic today is slightly different and requires an ancient Tactic to find facts. So let me get my crystal ball before I introduce the subject. It is the future threats and concerns of the Indian Ocean. My aim is to analyse the existing maritime situation of the IOR to assess the emerging security, economic, and environmental trends that will shape the region in the coming decades and how such situations would imply the decision makers and stakeholders.

5. The future appears to be an extension of the history on a line moving forward probably called today. So before looking at the future, let's have a look at what we have.

6. The Indian Ocean occupies approximately 20 percent of the Earth's sea surface. Its limits and choke points are known to all. The IOR is inhabited by some 2.5 billion people. By 2030, this number will have another 689 million people. Although the IO connects 36 nations, they display remarkable contrasts in politics, culture, economics, and environment. Just two years back, according to the United Nations Development Programme, the human development index ranking showed Australia in second position worldwide, while Mozambique ranked 184th, fourth from the last.

7. In addition to being the 3rd largest water body and having a very large and growing population, the IOR has risen to the forefront of world geopolitics mostly due to significant growth of China and India, considerable number of conflicts in the region and the world's continuing reliance on Persian Gulf hydrocarbon resources, leading to growing significance of the Indian Ocean's sea lines of communication and chokepoints.

8. Indian Ocean SLOCs in addition to being the main artery carrying oil from the Persian Gulf has also become the principal conveyor belt for the international coal trade. On one hand the expanding economies of China and India are now the top two importers of coal, whilst on the other hand, South Africa, Indonesia, and Australia together account for more than half the world's exports of thermal coal.

9. Therefore, following can be enumerated as the existing security concerns that merit analysis to make an assessment for the future;

THE OCEAN

10. The Indian Ocean is, and likely to continue to be, a major transit route for inter-continental and regional trade in commercial goods and fossil fuels.

The commercial shipping along the Indian Ocean SLOCs will expand in the coming decades. As the Chinese and Indian economies continue on their path of economic growth, their dependence on international trade will continue to grow in order to meet key resource needs and access export markets. Further, development of new port facilities will continue to strengthen the Ocean's routes from Africa and the Gulf Region towards India and East-Asia, including Australia.

11. A research conducted within the IOR participants both military and non-military mariners have pointed their opinion, and I quote; *“All respondents perceived the current security environment in the Indian Ocean as stable and overall positive. Also, there was a consensus among the respondents that those major sea powers which are capable of disrupting the SLOCs agree for the Indian Ocean to remain peaceful.* Unquote. However, in the same study, non-state actors were pointed out as a possible threat to stability in the IO.

12. The existing situation suggests that the great powers in the IO, or the emerging powers, are most likely to continue to seek the best advantageous course for its own progress realising the interdependence of the region and not pose direct threats to the security of the IOR. However, armed conflict amongst the major powers would be the worst case scenario and at the same time most unlikely one.

13. With this as the background, following different categories emerged or emerging in the maritime sphere that creates concerns in the realm of maritime security in the IOR.

a. A Global security environment characterised by an increase in non-state and trans-national threats. These acts include; piracy, maritime terrorism, drug trafficking and human smuggling and even cyber attacks. Among this un-exhaustive list, a worst case could be the use of a Weapon of Mass Destruction (WMD) by any terrorist group even though such remains as a least likelihood action.

b. Increasing maritime traffic and trade is likely to create congestion in not so modern ports and put severe stress on the few

mega ports. As J. N. Mak of Malaysia suggests, these mega- ports will be the new choke points in SLOCs in time to come. These conditions are likely to be targets of non-state or trans-national threat elements due to immense difficulties in security provisioning.

c. Any such action by these Non State Actors will adversely affect the growing needs of maintaining smooth function of SLOCs in view of already visible energy needs of the growing economies, the efficient JIT manufacturing lines and the trend to progress understanding the interdependency of even the most economically developed with those that are not.

d. A Global security environment characterised by proliferation of IT and high tech systems can also pose a serious challenge. The continued increase in capability and proliferation of high speed information systems provide accurate navigation availability and guiding for state and non-state parties alike.

e. Proliferation of advanced weapon systems and acquiring such by non-state or trans-national parties as discussed above is also a severe threat faced by states.

MARITIME TERRORISM

14. I will will not attempt to define terrorism but during the study, it was observed that most scenarios projected by many an analyst indicated six types of possible terrorist attacks on the maritime sphere:

a. **Ship as a barrier** Hijacking and sinking a large vessel in the Strait of Hormuz or Malacca Straits, thus blocking / disturbing all traffic.

b. **Ship as a weapon** Detonation of a high-risk load such as a liquefied natural gas (LNG) carrier in harbours.

c. **Sea Mining** Mining would be an effective strategy for terrorists to close narrow straits. Media and political attention would be high, even if the claim of mines is made without incident.

d. **Small boat attack** Explosive-laden suicide boat ramming a larger vessel can be extremely lethal, especially in the congested

harbours. An attractive feature of the small boat attack, from a terrorist perspective, is the relatively low amount of training and coordination required. A daring group may resort to wolf pack attack with small boats, provided training and motivation is given.

e. **Sea to Shore Covert Attacks** The People's Liberation Organisation of Tamil Ealam attempted one on Maldives in 1988 and ten years later in 2008, the LET attack on Mumbai are examples.

f. **Use of One or Many Containers to Transfer / Detonate a Weapon** Even with the presence of the ISPS code there is still a possibility for attempting such an attack or transfer of a weapon load.

15. Several groups have already recognized the inherent advantages of operating at sea and moved conspicuously to integrate waterborne modalities into their overall logistical and attack plans. The following have been among the better known of these organizations connected to the IOR:

a. **Al-Gama'a al-Islamiyya**: Carried out strikes against passenger ships during the early to mid-1990s.

b. **Palestinian organizations**: Many Palestinian groups including Hamas. The Palestinian Liberation Front carried out the infamous hijacking of the *Achille Lauro* in 1985, which remains, arguably, one of the most spectacular seaborne assaults to date.

c. **Jemaah Islamiyah & Abu Sayaff Group**: They have attacked shipping that included the exploding of the passenger ferry "Superferry" in 2004 and "Dona Ramona" in 2005 in Philippines.

d. **Al Qaeda and its affiliated terror organs**: Since 2009, few groups connected with Al Qaeda known to be acquiring maritime capabilities have been added. These include: al-Shabaab, al-Qaeda in the Arabian Peninsula (AQAP), and the Abdallah Azzam Brigades.

e. **The LTTE**: Until completely destroyed militarily by the armed forces of Sri Lanka, LTTE remained the most competent maritime terrorist group operating attack craft, logistic craft, and suicide boats. They even developed a fleet of merchant vessel operating under Panamanian, Honduran or Liberian flags. Their tactics had been adopted by many other terror organisations mostly due to information

transfer and may not be due to being connected with each other. B. Raman, however, made reference to the connections of LTTE with Abu Sayaff in explosive transfer in LTTE vessels.

16. However, there has been only one attack at sea since the attack on “Dona Ramona” in 2005 in Philippines; i.e. the 2010 attack on the *M Star* where no damage or casualties were reported for which the Abdallah Azzam Brigade, claimed responsibility.

17. The world’s oceans have not historically been a major focus of terrorist activity. In fact, according to the RAND Terrorism Database, maritime terrorism activities have not been frequent and seaborne strikes have constituted less than 2% of all international incidents over the last 30 years.

PIRACY

18. The number of acts of piracy and armed robbery against ships, which were reported to the International Maritime Organization (IMO) to have occurred or to have been attempted shows a visible reduction compared to the figures of 2011, even though, there is a remarkable increase in the west coast of Africa. Most of the attacks worldwide were reported to have occurred or to have been attempted in international waters, which is largely due to the incidents off the coast of Somalia and in the IO.

19. Ocean Beyond Piracy; an organisation dedicated for the study of reduction of piracy, estimates that the total cost of piracy for year 2012 to be US\$5.7 – 6.1 billion. The breakdown of expenses and its distribution are given in the table.

DRUGS & ARMS TRAFFICKING

20. In the IOR, the drug-infested “Golden Crescent” and the “Golden Triangle” are notorious for its illegal drug production. The linkage between drug trafficking and proliferation of small arms is well established.

According to experts, it may not be possible to control the spread of small arms unless there is a corresponding control of drug trafficking.

21. Since the time LTTE become defunct, there had not been any major arrests of any vessel carrying unauthorised weapons in the IOR. The tendency for narcotic smuggling is continuing through new routes including through transshipment containers.

HUMAN TRAFFICKING

22. Another lucrative business of the maritime mafia or terrorists is human smuggling. Exploitation of people who wishes to migrate due to conflict or natural disasters, or people who are willingly migrate for better life is providing a lucrative means of earning for organised gangs. Even though, people affected after natural or manmade disasters are considered to have the right to migrate due to the conditions exist, the way they are being transferred illegally without any safety or health standards endanger the very lives of these affected people.

23. Human trafficking is therefore, a matter of grave concern and one which needs serious attention.

MARITIME POLLUTION

24. Another non-military challenge to regional maritime security is maritime pollution. Such pollution may be caused accidentally, purposely or by an act of terrorism. For example approximately 0.5% of a supertanker's cargo of crude oil settles during its delivery voyage and has to be washed out. This is often done during the passage. For a tanker carrying 100,000 tonnes of crude oil that is 500 tonnes being jettisoned into the sea anywhere between the Persian Gulf and North East Asia. The main artery of oil to the east from the Gulf passes through south of our country and the effect can be seen in the picture.

ENVIRONMENTAL & NATURAL DISASTERS

25. Even though environmental disasters will have a great impact on the maritime environment and have the potential to affect maritime security, I do not intend to cover these threats.

WMD PROLIFERATION

26. Contrary to being a nuclear free zone, the Indian Ocean is becoming a “nuclear ocean” given the increasing number of regional nuclear weapons on land, as well as the indeterminate number on and under the ocean at any one time. Arguably, the regional nuclear proliferation can be seen both as a security threat and a guarantor of peace. Whether one stands in the school of Waltz or the school of Sagan would decide such perception.

27. Only one regional state – South Africa – had them but gave them up, while there are others still be trying to build or trying to improve upon. Australia appears to be comfortable with not having any nuclear weapons of its own on one hand, yet it exports substantial quantities of uranium on the other.

28. Even if agreed with Waltz that more is better, the existence of nuclear weapons is a guarantee of their proliferation. At the same time inequality of state access to nuclear weapons will continue to be a real security threat.

ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING

29. IUU fishing contributes to overexploitation of fish stocks and is a hindrance to the recovery of fish populations and ecosystems. This problem represents a major loss of revenue, particularly to some of the poorest countries in the world where dependency on fisheries for food, livelihoods and revenues is high. In fact, this is considered as a root cause of the Piracy off Somalia.

30. The worst effect is not taken as the money worth, but the extended harvesting conducted without allowing for sustainability.

31. China, Peru, India, Indonesia, USA, Japan and Chile, the so-called seven “fisher states” take in nearly two thirds of the world’s total “fish capture”. Unfortunately, however, the current status of Indian Ocean “fish stocks” signals little room for further expansion, in addition to the possibility that some, if not most, stocks might already be overexploited”.

32. The methods used for fishing such as bottom trawling, and high technology in locating fish shoals are also causing to exploit this resource beyond sustainability. The unfortunate result may be driving the poorer fisher folk not using such technologically advanced unsustainable fishing methods to bankruptcy.

NUCLEAR WASTE DISPOSAL

33. Despite the recent Fukushima nuclear accident, increased demand for energy security has contributed to increased global demand for nuclear power. This in turn has led to a potential increase in environmental insecurity due to the requirement of safe disposal of larger volumes of nuclear waste materials. The Indian Ocean Region has become a recognised conveyor of raw material and wastes of nuclear power. Even though, many speculates scenarios of terrorists hijacking such consignment to create WMD for terrorist purposes, this not very likely event appears to be masking the improper disposal of nuclear waste in the IOR.

34. While Africa had the dubious distinction of being first choice for the dumping of European Nuclear waste and persistent Organic pollutants in the 1980s it was the first to respond politically to the threat of “waste colonialism”. The Indian Ocean tsunami of December 2004 resulted in the washing up on Somali beaches of many containers of nuclear and toxic waste that were illegally dumped during the early 1990s.

35. With the increment in demand for more and more energy with the depleting fossil fuel reserves, it is likely that nuclear energy will have a higher demand being considered a green energy until it’s time to dispose of the waste. Here, the IOR with vast economic disparities is likely to have some countries that may consider a lucrative financial agreement with certain companies undertaking nuclear waste disposal.

EXPLOITATION OF OCEAN RESOURCES

36. The rich fishery resources and biodiversity, and rich deposits of oil, gas and many types of minerals makes the Indian Ocean a vital contributor to the economic growth of its littoral nations and many other nations which are dependent on these resources and the shipping lanes within.

37. The Indian Ocean also harbours an array of non-energy renewable and non-renewable resources. Various political, technological, and environmental factors affect the economic potential for developing these resources.

38. The development of technology, in detection and extraction of ocean resources is continuing to advance allowing exploitation beyond sustainable levels. As such are directly connected to the cost and profit benefits in investments by companies or nations, the long term effects on the countries affected does not appear to count.

CLIMATE SHIFT

39. The Geneva-based Intergovernmental Panel on Climate Change has concluded that the evidence of warming of the global climate system as a result of increased CO₂ levels is indisputable. The scale of the potential climate change impact in the IOR is so immense as to be difficult to comprehend, especially in the light of conflicting views provided by different scientific opinion groups.

40. If the IPCC is reliable, then the impact will be deeply felt in Asia; more than a billion people will have been adversely affected by the 2050s. Africa is also very vulnerable. The number of people annually subject to flooding in coastal populations is projected to increase primarily in South Asia and Southeast Asia. Millions of people in low-lying areas of Bangladesh, Pakistan, Sri Lanka, India, Vietnam, Myanmar, and Indonesia will be

affected. Most dramatic would be the anticipated wiping out of Maldives completely.

FUTURE TRENDS

41. The decline seen recently in piracy is likely to continue as a massive effort is being exerted by the world for prevention, especially in the West Indian Ocean. The combined efforts of Malaysia, Singapore and Indonesia and the role played by ReCAAP in updating information have brought positive results in reducing piracy and armed robbery in the Malacca Straits.

42. MDA training initiated by India after the tripartite agreement for Maldives, Sri Lanka and India is a very positive step in information sharing and training to analyse reported incidents and share relevant information with responsible organisations in the region.

43. It seems that placing of armed guards has contributed immensely for the visible reduction in piracy off the Somali coast. However, this trend could be reversed if the old tactic of LTTE i.e. using many small boats simultaneously; a wolf pack attack, is used by pirates for attacking any isolated merchant vessel even if the armed guards are available.

44. The ocean resources exploitation will continue unabated without due consideration for sustainability. The first casualties of this action are likely to be the people along the coastal areas especially the island dwellers and people living in low lying areas i.e. fisher folk who will lose the livelihood and the place to live.

45. The interdependence of world economies will increase whilst a new form of neo-colonialism continue. Nations aspiring or exercising global leadership is likely to exploit economic dependence of developing countries, expecting them to be lenient in return to financial or material aid provided. This however, is likely to cause contention within the IOR and may result in destabilisation of the region. Even though the major players themselves are

not likely to engage each other overtly in conflicts, new proxy wars on behalf of the neo-colonial masters may result in internal conflicts aided and initiated by opposing countries.

CONCLUSION

46. States today encounter a plethora of security challenges linked to the maritime domain. While non-traditional threats are proliferating at an ever increasing pace, military threats to security even during peacetime continue to exist. Although the stakes are too high to resort to war, major powers continue to compete and seek a favourable balance of power.

47. Non-traditional security issues from energy security to piracy to maritime terrorism presents unconventional security challenges that are significant concerns in to the future. Failed states and ailing states in the IOR will provide fertile grounds for extremism and terrorism as well as continuing law and order issues like piracy and insurgencies.

48. Key maritime security issues and challenges in the IOR were identified to be following:

a. There is a need to look beyond immediate security issues and look to the medium to longer term for major resource and environmental management issues.

b. The security of SLOCs is paramount. Supply chain dynamics are the key to maritime security issues and include ships, ports and choke points.

c. Many IO states lack the capacity for managing and protecting their maritime zones. Many external powers have significant interests in the IOR including freedom of navigation. The seeds for maritime security cooperation lie in dealing with this dilemma.

49. Even though, maritime terrorist incidents took place in the IOR, an important question is raised by Vijay Sakhuja: “from where this capability was obtained?” which he justifies with the fact that such capability was obtained from the Liberation Tigers of Tamil Elam (LTTE). The terrorist

activities at sea require much more expertise than that of the land, and nullifying of LTTE appears to have a visible effect since no maritime terrorist action has been observed since their demise.

50. Piracy off Somalia and the Gulf of Aden became rampant since the first half of 2005. This graph highlights the truth of the Somali Piracy. The prevention cost is exorbitantly higher than the piracy cost i.e. the money spent as ransom etc. But at the same time it has to be understood that, that it is the cost to be paid to ensure security of SLOCs. For prevention of terrorism, in addition to the cost almost in same proportion, the political will to act against such terror outfits and not just rhetoric like “we do not negotiate with terrorists” will be mandatory.

51. The world opines that China and India would emerge as global powers in the decades to come leading to their vulnerability to energy-supply disruptions. Their long-term energy and economic–security policies should be made accounting for being immediate neighbours. It is hoped that the two will synergize their respective strengths to ensure geo-strategic advantages, rather than proceeding on a course of mutual destruction.

52. Fossil fuel extraction for energy will be continued in view of being the most economical form giving IPCC speculation of a catastrophe that is happening in slow motion. The irony of advanced technology, or in actual fact the lack of it, may, result in this graphic made available in the September volume of National Geographic.

53. All in all, I would like to end this paper on a very different note quoting Mahatma Gandhi “Need can be satisfied but the Greed cannot be”.

54. Thank you very much ladies and gentlemen, for your patient hearing.