

Significance of Enhancing Maritime Visibility: Constrain to Overcome Maritime Blindness



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Introduction

Oceans cover 72% of the Earth's surface; carry 95% of its biosphere and 80% of global trade. Oceans are a critical support base for life on earth. Oceans are responsible for shaping of socioeconomic culture of global population and also for global ecology network. All most all living and non-living components of earth are interconnected through oceans and framing all of them in to one single spectrum. Oceans are a medium to state's security and power projection. A sizable number of words arsenals are carry onboard ships and submarines. Many nontraditional threats emerge from the seas and use the maritime domain for illegal activities. Yet the world does not really understand the critical importance of the oceans. The general public doesn't see and are unaware of the maritime domain. The governments and the policy makers don't give enough attention to the maritime domain. The media which see every corner of the land does not see what is happening at Sea. Even the mariners and the Navies don't see everything that happens at sea due to certain constrains. This is Maritime blindness. The world suffers from "sea blindness" or "maritime blindness", a maritime term for ignoring the critical importance of the Oceans around us. In opposition, "maritime visibility" is emphasizing the elimination of ocean blindness.

This paper analyzes the importance of oceans, reasons for maritime blindness, significance of curing blindness, enhancing maritime visibility and constrains which affects the visibility keeping the maritime domain blind.

Importance of Oceans: Significance of Maritime Visibility and Awareness

As a fact, oceans and seas covers two third of earth's surface and hold 95% of the living mass. Nevertheless, the oceans have long been recognized as one of humanity's most important natural resources which pump variable needs of mankind. The vastness of oceans has made it to be a limitless source of food, transportation, recreation, and many other needs. Socio economic importance and ecological importance of oceans are still unmeasured. Oceans have become a critical factor in development of states. Oceans contribute to poverty eradication by creating numerous live hoods. Over three billion people of the world depend on marine and coastal resources for their livelihoods. In addition to that, oceans are crucial for global food security and human health and also, it is the primary regulator of the global climate, an important sink for greenhouse gases and in return, it provide us with water and the oxygen we breathe. Finally, oceans host huge reservoirs of biodiversity and it

connects the each component and individual of global socioeconomic network. The following are different aspects of the importance of the ocean;

Economic Importance

In today's context the people with their enormous needs and wants has opened path for global economic network. Goods and food are shared worldwide among states and around 90% of world trade is carried by the international shipping industry. It's the most cost-effective way to move goods, food and raw material around the world. In today's context the oceanic transportation industry has transformed the world in to a "just in time" supply zone by which the former large storing yards that held on land has turned in to 'floating warehouses'.

According to a new World Wildlife Federation (WWF) report, our oceans are worth at least \$24 trillion and goods and services generates from coastal and marine environment amount to about \$2.5 trillion each year (WWF, April 2015). This economic value is consisting with fisheries, coral reefs, other marine plants, shipping lanes, and the productive coastline. 6.4% of global protein need is supplied by oceans. 3.5 billion People in the world are directly feed by ocean as their main food source. About 200 billion pounds of fish are caught each year. Furthermore, oceans are mined for minerals like sand, gravel, manganese, copper, nickel, iron, gold, silver, zinc and cobalt and drilled for crude oil. Offshore drilling nearly produces 30% of global crude oil supply annually. The Tidal energy caters a considerable portion of global electricity supply.

Ecological Importance

The fact that '72% of the earth's surface is ocean' determines a significant part of its climate and ecology. The hydrologic cycle is dependent on the vast amounts of water evaporated by solar energy from the oceans and deposited as rain on the land. Without this vast reservoir of open water, the earth would quickly become a desert. The oceans also provide a sink for nutrients eroded from the land. The seas regulate the global climate by serving as an enormous thermal mass for heat storage and as a reservoir for CO₂. From a purely

physical point of view, the presence of the oceans can be seen as essential for a climate on earth suitable for human life. Since then, oceans are still runs the world's ecological system which keep the equilibrium of global climate, natural food chain and bio diversity.

Social Importance

The importance of the oceans in spreading cultures through seas cannot be ignored. The oceans are so large that during the development of most of the world's cultures they could be considered to be almost infinite, with little risk of their overexploitation. However, it is a fact that the worlds cultures were interconnected through the means of seas from the history. This open access to seas has created different kinds of social relations of people with ocean. Food, transportation, recreation, and medicine are the direct close concerns of human social relations with oceans. From rich to poor, every mankind is directly or indirectly done business with seas in their socio cultural extends.

Political, Military Power& Security Concerns

The enabling power of the oceans is critical to allow the projection of military power around the globe. High mobility through sea allows the naval forces to reach long distances within a short period of time. These forces are very versatile, in the sense that they can undertake several types of tasks and regulate the use of force according to specific situations and necessities ranging from high scale wars to humanitarian assistance. Furthermore, they have the flexibility to shape the forces in to small or bigger taskforces, depending on the mission to be accomplished. Further, oceans have created a flexible and rapid mobile room for countries to extend their national power in various capacities. Large floating war machines can move nations military power through oceans making a deterrence to other states within a short time period, where the flexibility and the mobility has gained at a great level over oceans.

With the indisputable economic and military importance of the oceans, their political importance is inevitable. Ability to use the sea enhances the overall freedom of a nation.

A state needs a wide variety of contacts and communications with the international community to advance its influence and aims for its political stability and national progress. The sea facilitates in promoting commercial, cultural, scientific and industrial contacts between the littoral states.

As described above the oceans and seas are vital components of mankind on the planet. However, it is rather unfortunate that the world's attention on this vital aspect is still far below the expected level. On the other hand even with the modern technological advancements the world's visibility towards sea has many gray areas. The world does not see everything happening at sea and is ignorant of this vital portion of the earth.

Maritime Blindness / Sea Blindness

“The concept of maritime security begins with overcoming what I call sea blindness by improving maritime domain awareness. To gain maritime domain awareness, you must have an accurate operating picture, coupled with an understanding of what you are seeing, coupled with a means to act upon what you're seeing”.

Admiral Harry B. Harris, US Navy

Sea blindness also termed as maritime blindness is a raising matter for secure maritime affairs worldwide. On one hand the sea blindness is “general ignorance and failure to appreciate the essential maritime domain by the general public, policy makers and the governors”. On the other hand, maritime blindness is “lack of visibility of maritime domain, and ignorance of maritime strategic and security issues in the ocean commons”. The seas and oceans are out of sight and out of mind to general population. They don't see the sea and don't feel the sea and do not understand its function. Understanding of maritime domain is critically important to cure the sea blindness. Since it is invisible to policy makers of the nations, sea has provided a room for number of illicit and illegal activities and it has become a good ground for crimes in different scales which threaten the Maritime Security, Good Governance at Sea and Security on Land which affects the world peace.

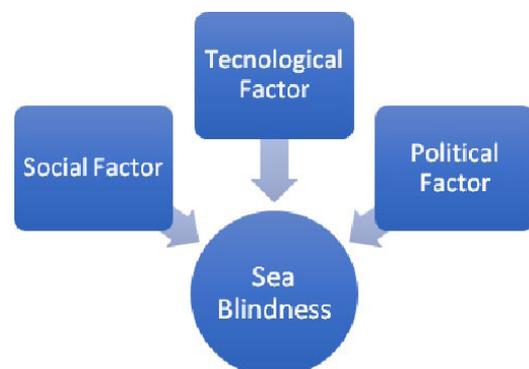
The low visibility of maritime domain affects in various ends. This creates a potential threat to

global maritime security concerns. Protection of global sea lanes of communication and choke points are critically important to run the world economy. The risk and danger on sea bound economy increases proportionately with maritime blindness. Further, isolated and un seen high seas are good breeding grounds for growing violent activities such as terrorism as well as for other nontraditional illegal activities like human smuggling, drug trafficking, IUU fishing and arms running. Still, the number of arms and nuclear arsenal floating at sea is unknown. Even though advanced technologies have been introduced in to maritime surveillance and other security perspectives, still a large portion of seas are shadowed. Two classic examples are:

The terrorist organization LTTE operated a fleet of ships or rather a fleet of floating armories far away from the homeland and away from the accepted shipping lanes for a long time. Merely they detected by human intelligence initially and through appreciating the situation afterwards. None of them were detected by the world or regional naval powers operating in the region with high-tech surveillance systems. These ships were hidden away from the regular shipping lanes and the operation of the terrorists was unaware for a long time.

Further, even at present the tragic of MH 370 has become just a fiction and no one still knows what exactly happened and where it is. These facts emphasize the capability and the capacity of eyes on the seas even in this information era. In fact the world doesn't see the maritime domain enough and the world is unaware of the things happening at sea. This situation has dragged the world in to “maritime blindness”.

According to my view, sea blindness is being fed by following three factors.



Social Factor

The social factor consists with socio cultural deviations, habits, tendencies of population, educational perceptions and common interest of communities. World community is rapidly moving in to do the business online and shop online. When ordered an item they receive it at their door step, but, only few are worrying about how did they came through? Usually they do not have any interest to know about the process of shipping; about the process the item arrived through oceans. A survey of 1,000 people across the UK, commissioned by charity Seafarers UK as part of Seafarers Awareness Week in 2014, found that there are major misconceptions about the scale and importance of the UK maritime industry. Just over 4 in 10 people (43%) knew that the vast majority of food imported to the UK arrives by sea. Half the food eaten in the UK is imported and, of this, 95% comes by ship - a fact known by only 2% of the public. More than one in four (27%) assumed the bulk of UK food comes by air and a fifth (20%) thought it comes by road.

Technological Factor

The technological factor is the technology used in detecting the maritime sector and the technical sources and technologies that connects people and maritime sector with providing information. According to that, technology affects in creating sea blindness in two different ways.

Detection technology: Affects the limitations of access over maritime domain

Communication technology: Affects the information flow to public on maritime domain

Developed countries are highly equipped with maritime surveillance capabilities which enhance the power of detection and identification by which the sea blindness is get mitigated. But still there are limitations in detection and flowing of information towards the people on maritime affairs.

Political Factor

The political factor represents the involvement of the policy makers with maritime

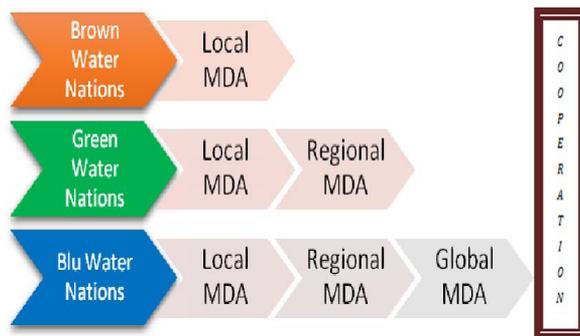
sector. The profile of legislature, national policies, and defence policies, which controls the country's maritime sector are directly or indirectly affecting the sea blindness. States' foreign policies, partnerships and bilateral or multi-lateral relationships with other nations affects in sharing the resources, technology and responsibilities in maritime sector.

Enhancing Maritime Visibility/ Ceasing Sea Blindness

Enhancing maritime visibility will create more secured and safe seas around the world. Knowing what exactly is happening in maritime domain blows the gray areas away from it. Therefore, improving the global awareness on maritime domain is the strategy to cease the maritime blindness which is imperative. The approaches to cease the sea blindness and improving the maritime visibility is essential for world security, global commerce, geo environment and for good governance at sea.

'Maritime Domain Awareness' is the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy or the environment of the state. (U.S.Navy, 2007) "Effective understanding" occurs when a decision-maker's comprehension of relevant information allows him to take appropriate action. It is believed that, MDA consist of what is observable and known (situational awareness), as well as what is anticipated or suspected (Threat awareness). It occurs when these two components are brought together to provide a decision maker with an amalgamation of operational, intelligence and environmental information. Viewed in light of Navies' presence in worldwide, MDA can translate to Global Maritime Situational Awareness (GMSA) plus Maritime Threat Awareness. GMSA is referred to a one single nation with widespread maritime power consist of navy, coast guard or a network of merchant navy, possibly operates by powerful nations but, nations with smaller maritime units can operate MDA at global topography incorporated with other nations building up a huge multinational network in MDA.

According to my view, MDA can be defined in local, regional and global arenas. It also can extend from military to socio, environment segments in a different scales. Local MDA limits to territorial limits and responsible extensions of coastal states where they can contribute to regional MDA in cooperation with regional states and sharing assets, information, through fair multi-lateral relations. Depending upon the maritime power of the nations, desired arena of operation is varying from brown water nations to green water nations and to blue water nations.



Enhancing the maritime visibility is the medicine to cure maritime blindness. But there are many constrains that are directly or indirectly affecting against curing the blindness.

Constrains to Overcome Blindness Vastness of Seas

The oceans extend up to 72% of the earth. It extends from Arctic to Antarctic. Pacific to Atlantic. The area ocean covers is really vast. The vastness compared to land area is directly affecting the visibility and awareness. Even with the most advance technologies seeing everything happening and knowing everything happening at sea is practically difficult. Vastness of seas and oceans is the biggest constrain to enhance visibility. It also encompass many other constrains to overcome blindness.

Unavailability of Advanced Technology and Resources

Unavailability of required technology and resources has a direct impact on enhancing maritime visibility. Both resources and technology are inter connected and technology enhances the capabilities and capacities of resources.

Technology has become a third eye to reveal unseen facts in maritime domain and resources provide a medium to move technology. Lesser the technology and resources limits the capabilities. However, unavailability of required advance high tech maritime surveillance platforms and network systems affects enhancing the visibility in maritime domain with improved capabilities over detection, identification, classification and reaction to threats and security issues in maritime sector and also to provide and distribute information towards global communities.

Culture of Secrecy

Maintaining ‘Culture of secrecy’ is a term determining the behavior in unrevealing of information to others. Many have taken this as a serious security concern in terms of safeguarding national security or national interests. Some share information and required technology only with very limited countries. This culture has restricted the flow of information and resources among other nationals weakening lateral co-partnership between them in terms of maritime domain awareness and security concerns.

Poor Link Between Politicians and Maritime Sector

The policies of policy makers and the political environment of states denote the out frame of state’s national policies in order to achieve national interests. Lack of understanding of the importance of maritime domain by the policy makers and not providing adequate assistance is considered a globally experienced constrain to overcome the blindness. Therefore, this political segment of the state should align with the objectives of maritime sector. These two segments needed to corporate in creating the strategic texture of the country in order to get the maximum output from the maritime domain and to keep the maritime domain safe and secure.

Countries’ Educational System.

Education system is a key feature which drives the flow of knowledge in to different directions. Education system describes a considerable portion of the attitudes, knowledge

based attitudes, common interests and general apathy of the population. Improving maritime visibility can be achieved or feed with education system of the state to the public.

Poor Interrelations Between Regional Partners in Maritime Perspective

As it was mentioned above, regional partnerships are pretty much important in improving MDA reaching its regional and global stages. Some states stay behind in terms of cooperation giving a normative effect on reducing maritime blindness. High seas do not belong to individual states and falling in to the category of global commons. This is another constrain to overcome the blindness. States are less concerned regarding the things happening away from their seas and not worrying about what is taking place in high seas. Most of the countries are incapable of maintaining MDA in high seas. Cooperating and making partnership is the way out to address this constrain.

Absence of Media at Sea

The merchant men, navies, coast guard and maritime law enforcement agencies do their duty at sea very silently. The world's news media is giving attention to things taking place at sea very occasionally. Media does not play a role to promote maritime sector or they do not make the general public aware of the things taking place at sea. The awareness of activities taking place in maritime domain by its consumers or the general public is very much important to get rid of this blindness. Less access to maritime domain for media and less attractiveness from audience affects in giving publicity on maritime domain.

Lack of Public Interest

The lack of public interest is a critical factor when implementing MDA in to their sociocultural segment. The interest is a anthological fact of

human being which reacts in different responses to various inputs. It's a public lethargy to the importance of maritime domain.

Conclusion

As described the oceans and seas are vital component of mankind on the planate. Securing the sea lanes of communication, ensuring the maritime safety, keeping the stable and peaceful use of oceans as well as the conservation of marine resources has become vital concerns. The enormous resources and importance of use of seas has extended the boundaries of coastal states' territories in to the sea making it a more complex political arena. Oceans have direct or indirect effect to entire mankind economically, culturally, politically, ecologically, and on their security. However, unfortunately the world neither has nor really understood the vital importance of maritime domain; they are blind on this. Further, even the maritime and naval community that knows the vitality of this domain also do not see the sea as they wand. That is another aspect of blindness. In order to get rid of these blindness's and to enhance the maritime visibility many initiatives are in place. But there are various factors that affects curing blindness. Understanding and addressing these constrains is imperative to improve maritime visibility.

BIBLIOGRAPHY

U.S.Navy. (2007, May 29). Memorandum for Distribution. Maritime Domain Awareness Concept.(Accessed on 08 September 2017)

UN, U. D. (2017). Oceans & Seas. Retrieved from Sustainable Development Knowledge Platform: <https://sustainabledevelopment.un.org/topics/oceanandseas> (Accessed on 08 September 2017)

WWF. (April 2015). Reviving the Oceans Economy: The Case for Action - 2015. SA, Swisterland: NCP. (Accessed on 07 September 2017)