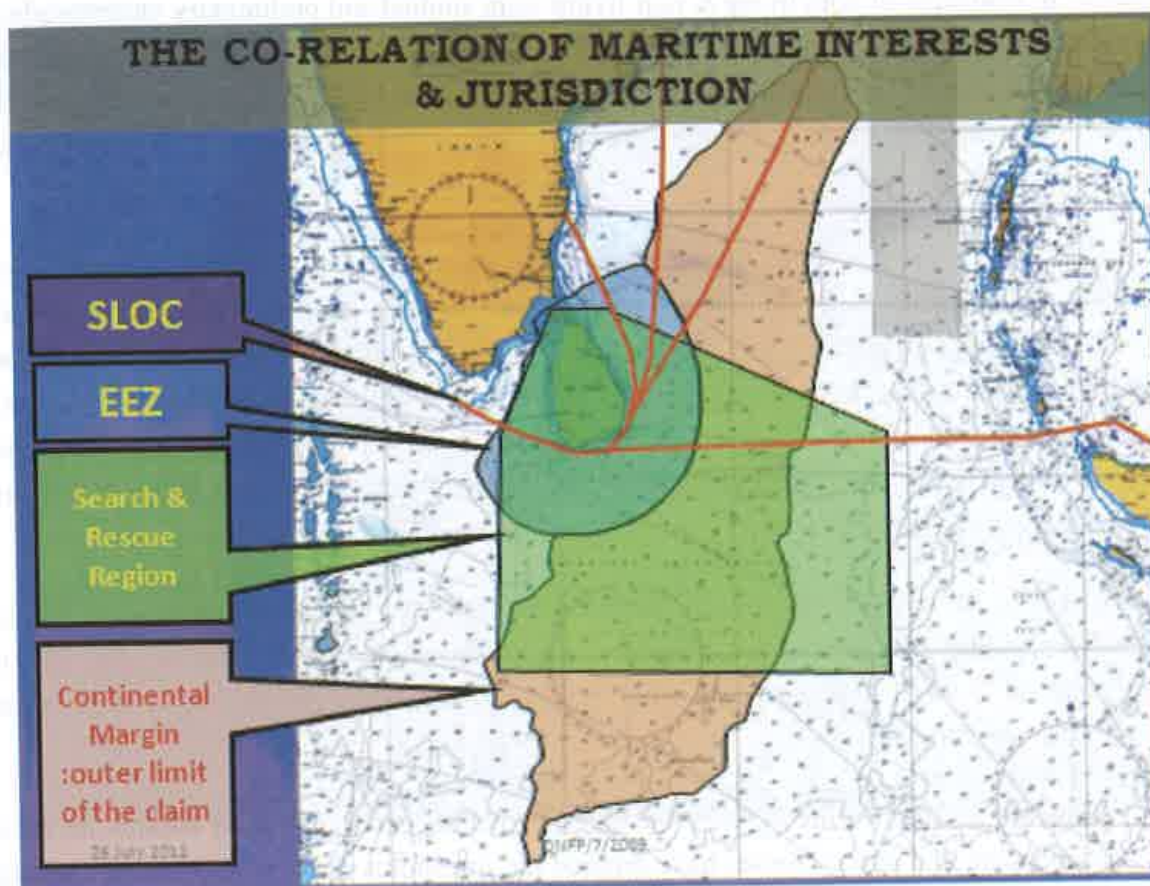


Maritime Space; Our Final Frontier

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1. It is a mere 1340 km of coastline of this island nation, compared to 7500 km plus in India, 1050 km in Pakistan, 644 km in Bangladesh that the nation failed to protect which eventually cost Trillions, should monetary value be placed on the losses suffered in past two & half decades of separatist terrorism. Had the island nation strengthened the coastline, enhanced the surveillance & effected law enforcement in the coastline, the course of history could have changed the destiny & prosperity. However, being a nation of land-lubbers; meaning person on land in naval vocabulary, who as a nation failed to understand the necessity of protecting the shoreline let alone the seas, the country suffered. Not only in contemporary history, even in ancient Kings' Era same mistake was done; it was a case of history repeating itself, where Kings & Queens who ruled this country simply failed to grasp the naval prowess to deter foreign aggressions.
2. Mantota, the present day Mannar at one point of time in the recorded history was a thriving trading port, but it lacked the necessary protection. Hence when foreign mercenaries and invaders came by sea to exploit the richness of island nation's heritage through Mantota, along the Malwatu Oya to Anuradhapura, kings simply changed the locality of the governance, but never built a mechanism to protect the coastline. It was the same old story for Gokanna, the port city for the Polonnaruwa Kingdom, just as Mantota for Anuradhapura. The Kings & Queens were eager to impose & collect taxes from these ports but seems to have failed in devising defences against sea-borne threats.
3. Those kings, Parakramabahu the Great in 1153-1186 & Nissankamalla in 1187-1196, who had a visionary statesmanship, built and used the naval power as tools of governance, stand prominent in island's chronology. It is also interesting to note that whenever the nation had strong naval capacity, the state flourished and never was under threat from external sources!
4. It is with this brief glimpse in to the chronicles the paper focuses on the present day. Sri Lanka is bestowed with a territorial sea of up to 12 nautical miles from the baseline covering a sea area which counts one third of the land mass. Then there is an Exclusive Economic Zone (EEZ) of up to 200 nautical miles from the base line which envelops a sea area equaling to seven times the land mass. Then by international convention, there is a Search & Rescue Region (SRR) which encompasses a sea area equal to 27 times the land mass of the country. In 2009, the claim for the Outer Margin of the Continental Shelf, which counts a sea area of 21 times the land mass, was submitted which on acceptance would grant sovereign rights on the sea-bed and the sub-soil. And to top the list, the main Sea Lane of Communication (SLOC) that connects Far-East with Far-West runs through it. (Figure 1) What do all these mean? Surely the island nation is not immune from geo-politics that is becoming more and more ocean dependent! In understanding the relevancy of those ocean spaces to geo-politics, a clear understanding of the meaning of several terminologies is a necessity.

Figure 1.



5. The Grand Strategy is defined as the application of national resources to achieve policy objectives. This is the top most steerage where nations profuse their respective national interests. Different countries adopt theoretically similar, practically dissimilar approaches in securing their national goals. The Grand Strategy does not stand alone; it is the culmination of series of components focused at achieving the superior objectives. Some countries adopt brackets of five year plans while some adopt fixed targets.

6. In serving the Grand Strategy, Maritime Strategy encompasses how all maritime sources; naval, non-naval, resources, capacities & regimes are being applied in order to achieve policy objectives which in turn are catering for Grand Strategy. What is common for nations is that when it comes to maritime strategy more or less all maritime nations adopt same and follow similar lines.

7. The word Sea-Power denotes nation's ability to exploit the oceans for its advantage, influence in peace & impose its will in an event of war. In today's changing political polarity, Sea-Power does not necessarily represent the Naval capacity alone, but Naval capabilities continue to be a strong component in defining the Sea-Power.

8. As Sri Lankans what can be done with this ocean space? Although as a nation this island failed to understand the same, some countries did not. Sri Lanka is still dependent on the first & the last island-wide oceanographic study undertaken by the Dr. Nansen Fridtjof programme in 1978-1980 under sponsorship of the Government of Norway through their INGO named NORAD. It was

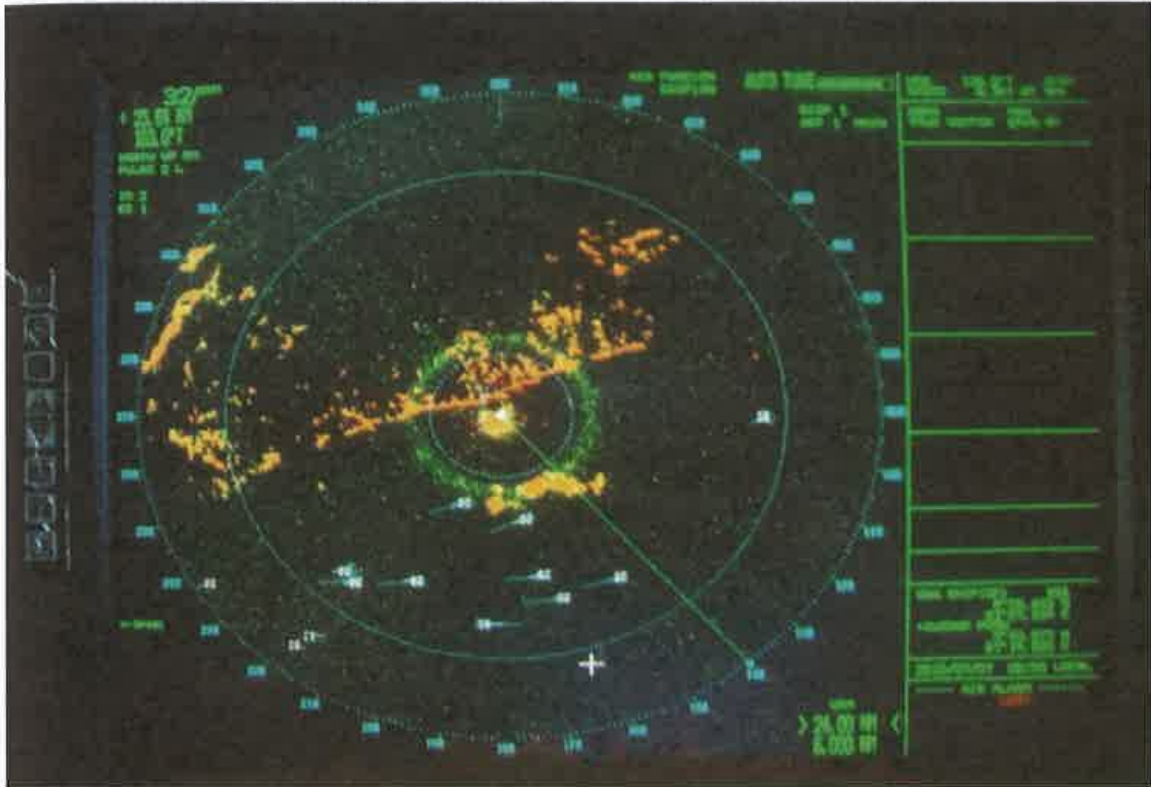
during that scientific study that for the first time the sustainable fish harvest was estimated, potentials for minerals & resources of both living & non-living were studied and preliminary understanding of how the ocean behaves around the island was established. The study also revealed for the first time, what could be done with the seas around & the immense potentials it offers. The series of political events that took place thereafter influencing the sovereignty of the country at latter stage are never to be forgotten.

9. Whilst the United Nations Convention on Law of the Sea (UNCLOS), a remarkable set of rules that will be celebrating the thirtieth anniversary this year, and the Sri Lankans need to be proud of because of the leadership given by late Mr. Shirley Hamilton Amarasinghe in formulating the convention, set forth what coastal state owns and what the obligations are as a community, Sri Lanka is far from exploiting the rights it owns. The maritime jurisdiction in different maritime zones and regions is the country's real-state; the UNCLOS is the legal authority; the SLOC is the country's biggest asset and having no capacity to exploit the resources is the country's biggest obstacle.

10. It is believed that forums such as these would make the young generations aware of this obscured frontier, and also believe that it is the resource personnel of today that need to convince the policy makers to adopt visionary view in harnessing the naval prowess just as two of the greatest Kings did many centuries ago.

11. As mentioned earlier, the SLOC is the biggest advantage, because today nations are becoming ocean-dependent and energy routes have crossed the thresholds of being mere ocean passages. By end 2010 world ranking, Port of Singapore is the second largest container handler in the world & Colombo is at number Twenty Nine. It is interesting to note that out of top ten ports, the first eight are in SE Asia, with Chinese, Singaporean & Korean ports topping the list and only Dubai & Rotterdam from elsewhere. It is the geographically advantageous position of Sri Lanka over the SLOC that demands nation to be more vigorous in pursuing further as Nawa Sheeva port facility in Mumbai is ranked at 26th and no other South Asian ports are at top 50. In fact, Indian volume of cargo is the decisive factor for country's maritime trading prospects & by simply facilitating transshipment of them would earn more for coffers.

Figure 2. SLOC south of Hambantota



12. The figure 2. above is a snap-shot taken when coming out from the new port facility at Hambantota. As it reveals within a distance of 24 nautical miles, the complete west & east bound traffic is visible. In fact this is the very reason external political forces prevented Sri Lanka from developing port facilities such as Hambantota to exploit the opportunities the maritime space around the island offers. It is pertinent to note that the world has crossed the threshold of stand-alone marine trade many decades ago; no country builds channels, canals, ports & marine structures just for the fun of it but for strategic interests. These strategic interests need not be military, naval or defence related in today's competitive economics.

13. In presenting this paper the author takes pleasure in revealing some observations in this forum from a study undertaken by the author's last Sea-Command of SLNS Samudura, an Off-shore Patrol Vessel (OPV) of the SL Navy. The ship traversed the SLOC whilst attached to Southern Naval Area in this study with the aims of analyzing the traffic volume, identifying the traffic type and surveying the destinations. For the study the ship surveyed the maritime jurisdiction covering approximately 14,719 Sq Km. The methodology adopted for the analysis by gathering of ship's data using the Automatic Identification System (AIS), by visual confirmation and where necessary by establishing radio communication with the relevant ships.

14. It was evident from the statistics that the traffic volume averages to 60-100 merchant vessels per day in SLOC with 60% of them being cargo ships. The cargo ships are encompassing the Container vessels of both categories; the Feeders and the Main Liners. Feeders are the vessels that connect regional ports by bringing import/export cargo to & from Hub Ports. The Main Liners are the vessels that connect Hub Ports. Generally, the Main Liners are capable of carrying more than

3000 of containers, or Twenty-foot Equalant Units (TEU) to be more precise, whilst the Feeders are of below the carrying capacity of 3000 TEU. The ships are getting bigger to bring the unit-cost down and world is witnessing Ultra Large Container Carriers (ULCC) of more than 15,000 TEU & New Panamax of approximately 12,000 TEU. These ships need deep waters of 16m and deeper, and Sri Lanka's waters are perfectly suited as the depths are available in immediate vicinity due to narrow shelf width and tidal variations anywhere in the island is less than three feet or one meter.

15. Out of the total of vessels observed on West Bound passages, only 22% call on at Port of Colombo. The 60% of cargo vessels provide opportunities for potential services through our ports, a competitive and efficient service sector could well dominate the region. The nearest competitor to Sri Lankan ports is in Kerala, India.

16. Out of the total volume of traffic, 40% was observed to be Tankers and this needs attention. Whilst some Tankers ferrying refined petroleum products use the Traffic Separation Scheme (TSS) at Dondra, the heavy Tankers were observed to be taking a route well south of the TSS. They are mainly crude oil tankers and all west bound vessels were observed to be running on ballast whilst all east bound detected to be fully laden. The matter of concern in these passages is that both present potential dangers of pollution. The vessels fully laden in an event of collision or accident would spill oil in Sri Lankan EEZ and vessel runs on ballast carry the risk of introducing invasive species in an event of de-ballasting within the EEZ.

17. Next to SLOC, the designated Search & Rescue Region (SRR) becomes priority as country's obligations in international arena make it a regional force to be reckoned with. The international convention on Search & Rescue adopted in April 1979 & came in to force in June 1985 have allocated a maritime space to the Government of Sri Lanka and Sri Lanka Navy is the designated agency in executing the Marine Rescue Coordination in the area. As super-power navies reduced their presence in vast ocean space due to financial cut-downs, considerable vacuum has been created in the international waters paving way for many illegal activities in these unpatrolled ocean spaces. Sri Lanka Navy's experience in hunting down the terrorist's floating warehouses in international waters far away from home jurisdiction is an indication of how serious the threats have become. Hence policing the sea areas under coastal state jurisdictions, in this case a maritime space of 27 times the land mass, become a paramount importance. The Search & Rescue Region is not merely an ocean space, its responsibilities and obligations have political interests too. In early 1990's there had been a political under-current to take control of designated SRR away from the country claiming Sri Lanka's inability to fulfill the international obligations due to lack of resources.

18. So far the paper deliberately stayed away from mentioning the potentials in exploiting the marine resources both living & non-living within the national maritime space for the economic development of the island nation. As analyzed, nothing supersedes the strategic geo-politic factors in the maritime space, and all resources are rendered useless unless and until nations secure the maritime interests from geo-politics. No oceanographic excursions, expeditions & data stand alone as pure scientific today, but at the same time ocean space is seamless in the sense the flow of water does not confine a country to stand alone either. In today's marine science countries need to be collaborative, need to be open-minded in oceanographic studies as what they know about the maritime

space is mere trickle of knowledge. A good example is the last tsunami warning on 11th of April 2012, where disturbances in east coast were experienced, but no killer waves. Why? Because oceans behave differently as it is a dynamic environment, countries need to know the dynamics to forecast, need to know the real-time data to model scenarios to predict, and most importantly need to have resource personnel to go out to sea and do all these observations.

19. Marine research remains to be costly affairs and that's why there is a saying 'measure once-use all' meaning whoever goes out to sea collects observations, samples and data that could be used by all others. There had been several studies done on marine resources that are known to be there, but many more specific studies are needed to determine the most economical means to exploit them. The potentials for hydro-carbon & petroleum resources are high on the eastern seas but technology is still to be developed to extract them, therefore present generation is obliged to preserve them for future generations. The opportunities for development of wind & wave energy are high on the south-eastern coastline, yet capital investment is still too far away to bear. The sea-surface temperature in the south western sea board and north eastern sea board determine the amount of water vapour the wind will carry in bringing rainfall for agriculture based economy. And surface temperatures if differed even by one degree affect the amount of moisture in the wind. Although these patterns are known, what scientists do not know is the changing dynamics and the effects they would bring on the climate. At the beginning, nations were interested in knowing the surface & under surface currents, their temperature and their salinity conditions partly because of the naval applications of these parameters in under water warfare. But today same will demonstrate how the nutrients & planktons move around and concentrate, to which the fish stocks gather around. And when the small fish stocks gather, bigger fish will invariably loiter around, these are real time happenings, where simply observing certain parameters such as Ocean Colour, currents and temperature the fisher folks are directed for better catches at better efficiency.

20. In concluding the paper, the author hopes the readers would have understood the immense potentials the oceans around the island offer and the need of strategic vision in harnessing national security with sustainable exploitation of maritime resources. The necessity of resource personnel at different layers of the profession; Graduates to Technicians, Operators to Analyzers, visionary planners to officials, all form pieces of the wider network to achieve desired objectives. On final note the author wishes to extend heartfelt gratitude to the Vice Chancellor & the organizing committee of this symposium for granting the opportunity to present the paper.

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