Means to ensure gap free coastal surveillance to Sri Lanka

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Abstract— This paper writer is attempting to formulate combine strategy for effective coastal surveillance mechanism for Sri Lanka. This will enable to counter existing maritime threats and challenges in to the island. The existing security architecture is challenged by various transnational maritime security issues. Sri Lankan key military maritime security affiliates are Navies, Coast Guards, Air forces, Police and Maritime Intelligence services. Civil maritime affiliates such as Port Authorities, Customs, Emigration and Immigration, Department of Fisheries cannot be ruled out and have the responsibility of establishing maritime security in the country. Maritime forces have the ability of defense in depth to interdict threats to the country. Sri Lanka is more vulnerable for traditional security issues and non-traditional security issues such as drug trafficking, gun running, terrorism, piracy, armed robbery, poaching, marine pollution, human smuggling, illegal transfer of item and IUU (Illegal Unregulated and Unreported) fishing activities.

My research problem highlighted inadequacy of existing coastal surveillance mechanism leads the path to increasing of transnational security threats and challenges to the country. This puzzling issue is highlighted the significance of expanding our maritime domain awareness capabilities counters such threats. The objective of this paper is to Drawing attention to the insufficiency of coastal surveillance system in Sri Lanka. Researcher has selected qualitative research methods with collecting data from secondary sources and this will include scholarly articles, books, case studies, journals, etc. Further researcher will forward data with his personnel observation. The requirement of effective maritime domain awareness system is in high peak with existing situation in the country. This paper will highlight the naval contribution and initiative to the maritime domain in Sri Lanka.

Keywords: Intelligence, Surveillance, Maritime Domain Awareness

I. INTRODUCTION

In this paper, the writer is attempting to formulate combine strategy for effective coastal security mechanism to ensure gap free coastal surveillance structure to counter existing maritime challenges to Sri Lanka. The existing security architecture is challenged by various transnational security issues and as an island, it is important for Sri Lanka to have a 360° coverage security system. Sri Lanka Navy and Coastal Guard are the main security components which provide maritime security to the country. The other authorities providing security are Sri Lanka Custom, Immigration and Emigration Department, Fishery Department, Coastal Conservation Department, Sri Lanka Police, Wildlife Department, Sri Lanka Army, Sri Lanka Air Force and under the Sri Lanka Navy security providing affiliates are ships and craft, special boat squadron, coastal protection units, coastal foot patrol units and naval detachments. Sri Lanka is more vulnerable for major nontraditional security issues such as drug trafficking, gun running, terrorism, piracy, human smuggling, illegal transfer of item and IUU fishing activities. Further, the benign role of disaster response, protection of maritime environment and Search and Rescue Operations (SAR) are major aspects under the navy. Providing maritime security to the country is one of the major challenges and in some occasions the writer has observed that existing maritime intelligence and surveillance capabilities are insufficient to identify the issues at the precise time.

In this essay, the writer is interested in knowing whether expanding maritime intelligence and surveillance capabilities by combined security affiliates in Sri Lanka ensures greater protection for existing maritime security issues which harm the national security of the country. Being an island nation Sri Lanka has the responsibility of protecting a huge maritime environment around the country. The writer further noted the inadequacy of existing maritime intelligence and surveillance systems leads to the increase of illegal sea borne activities to the country. It is hypothised that the Lack of Maritime Domain Awareness can make Sri Lanka vulnerable to maritime threats.

Comprehensible understanding of maritime theories is a key factor for effective cooperation. To understand about the security dilemma in contemporary situation in Sri Lanka the writer expects to discuss the theories of Security, Sea Power and Maritime Domain Awareness (MDA). Because it is highly essential to understand about maritime theories as the understanding of these theories and concepts are very important to strengthen the link between protection units and it is easy to practically understand the situation. It will further help to increase domain awareness to formulate a combined strategy to build a national plan on maritime security.

II. METHODOLOGY AND EXPERIMENTAL DESIGN

Epistemology behind this research is the social behavior of maritime security components by understanding the significance of surveillance mechanism around Sri Lanka and the countering strategies for maritime threats and challenges to Sri Lanka. This broad area of social science needs to be proved with logical reasoning of theories based on laws of cause and effect. The writer used quantitative methods to collect data. This will be collected from secondary source of books, articles, journals, website releases, dissertations, Video and audio materials of and published data of expertise in the field of maritime security. Further writer expected to gather knowledge from officers and sailors experience in the navy in the field of maritime security and writers own observations. International practices with relevant to maritime security will highlight in the research.

It is hypotheses that Lack of costal surveillance system makes Sri Lanka vulnerable to transnational maritime threats and challenges.

III. RESULT

A. Theoretical Understanding of Security, Sea Power and Maritime Domain Awareness

With the evolution of modern security architecture used to highlighted especially in the field of international relations. Issues of arm race, Balance of power and war and peace, are key areas of study under security. Maritime security is a major role for island nation and the standard maritime intelligence and surveillance system will justify the security to the nation.

The security power is always offensive. States cannot escape the security dilemma, because military expansion of power always appears offensive to the other. Expansion of maritime intelligence and surveillance capabilities may witness to our neighbours as offensive action; however it is

important to understand the realistic nature of the security. Security would have been analysed and defined over the decades. When it comes to the maritime security writer's next secondary level concept is 'Sea Power'. Sea power is larger concept than land power and air power. The maritime historian such as Admiral Mahan, Julian Corbett and modern maritime experts such as Robert Kaplan are well recognized persons who talk about maritime power.

When studying the Sea power necessity to understand the Maritime Domain Awareness. It is basically effective understanding of anything which associated with maritime domain which could impact security, safety and economy (Till, 2013, p.307). Situation awareness is a key factor for this concept and gathering of information, intelligence and surveillance can be discussed under this concept. If summarized starting with broader picture of 'Security' and subsequent concept of Sea Power and Maritime Domain Awareness will be discussed in subsequent paragraphs which will help to elaborate the topic.

B. Holistic Approach to Security

The famous professor for international relation Barry Buzan five sectors of security so influential that it has become " the canon and indispensable reference point for students of security" according to him the security of human collectiveness was affected by factors in five major sectors, those are namely military, political, economic, societal and environmental (Sheehan, 2006, p.46). Maritime security is lies over all four components of above and it shows the importance of maritime security to an island nation like Sir Lanka. England used to enhance their maritime capabilities and she became a great maritime power with understanding potential important to protection of coastal area around her being an island nation. Sri Lanka fails to understand the importance of border protection and costal surveillance throughout the history and inability to understand the potential important to safe guard maritime environment led to horrific war for thirty more years. That is how army outnumbered naval strength in the country due to internal security pressure. Now this is the era to change of policy decisions and strategy to utilize more resources to maritime environment. Then it will help to establish maritime and economic security in the country and lead to maritime power projection.

C. Sea Power to Strengthen Coastal Security Surveillance
Defining of Sea Power is having contradicted argument
even the scholars in the field of Maritime warfare. However
to process with this essay writer found one interesting
setting for national policies derive from Sea power.

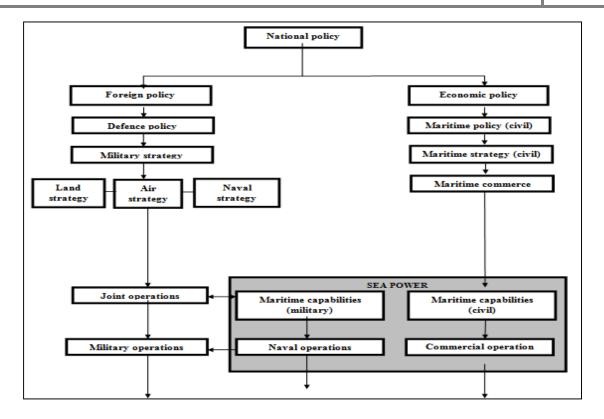


Figure I: Sea Power and its setting (Till, 2013, p.24)

This is the time to apply this theoretical frame work into Sri Lankan scenario to understand the importance of gap free coastal surveillance. The Sea power is relative concept and all countries have some degree of Sea Power. It is essential to discuss Sea power under Sri Lankan commercial and military maritime capabilities as per the above diagram. If looked at the coastal protection surveillance mechanism around the island military maritime capabilities are basically naval ships, craft, naval surveillance systems and costal protection units. Under civil maritime capabilities merchant shipping, fishing, marine insurance, Ship building and repair can be taken. Naval operations are conducted via military maritime capabilities and commercial operations are conducted via civil maritime capabilities. To establish Sea Power the combination between these two elements are essential.

Location of our country is vital important when analysing the Sea Power of Sri Lankan military and civil maritime capabilities. The boarders of Sri Lanka are vulnerable for major non-traditional and traditional security issues. SLOC's (Sea Lines of Communication) are running adjacent to Sri Lanka and shipping lanes are vulnerable for the security threats. Another important area of study is energy security around Sri Lanka by protecting SLOC's and

protecting of maritime environment from navigational hazards and pollution. Tactical level security components

observing difficulty of establish effective Sea Power hence our maritime environment required to cover huge area at sea and surveillance capabilities need to be expanded accordingly. Further inability of having combination of security effort between maritime affiliates is another area to concentrate. Extremist ideology and jihadist thoughts of contemporary world by some segments of population in the world can be badly effect to the national security of Sri Lanka. Illegal migration of violent groups can be a new security challenge in future to the Sri Lanka Navy.

Given its strategic location geographically, Sri Lanka's maritime security is critical. Expansion of maritime intelligence and surveillance capabilities by enhancing factor of 'Mobility' is one strategic solution to strengthen Sea Power which writer is interested to convince. With the

advent of current maritime issues, it becomes of paramount importance to take required action and counter specific issues within a very limited time frame and space. In order to achieve gap free coastal surveillance objective the speed and range become critical success factors. Maritime Patrol Aircraft (MPA)/ Medium Range Maritime Patrol Air Craft (MRMPA)/Dornier Air Craft (DAC) can be utilized to enhance the maritime surveillance capabilities in Utilizing Off Shore Patrol Vessel (OPV) for surveillance affords only the larger platform availability to conduct military operations. A key advantage of MPA/MRPA/DAC is militarily far exceeds the benefits incur by OPV. MPA/MRPA/DAC will directly afford much quicker real time live data inputs via technology which is an inbuilt capability of MPA/MRMPA/DAC systems and will aid the officers to take required military actions with almost zero lead times. Timely action is a critical success factor in ensuring national security. Surveillance aircraft have the capability to cover a vast area geographically with much greater speeds. The savings in terms of time is very considerable for giving its potential speed in full operational use. Military Budgetary expenditure for navy need to be carefully considered with recommendations and according to that type and modal of the Air Craft, it can be decided. This can be utilized as a combine military operation with Air Force since this is not an individual challenge to one military unit, whereas challenge to national security of the country.

Transferring of illegal items crossing the IMBL (International Maritime Boundary Line) has become huge barrier for the national security of both the countries. Effective mechanism is needed to discuss sharing of intelligence and surveillance data between intelligence services among the counties to counter possible threats. Intelligence observations have made most of the illegal items were transferred close to IMBL area and both navies (Sri Lanka and India) required to identify possible drug/illegal items transferring routes hence this is a transnational activity and it can become worst in future. In term of IUU fishing civil maritime capabilities can be used as strategy. It means that domination of sea by out numbering of Sri Lankan fishing boats in North and North West waters around Sri Lanka (Civil Maritime Operation). This will create psychological effect to Indian fishing community to reluctant to fishing in our waters. This is totally intelligence operation which required a comprehensive operational plan. Kudankulam Nuclear Power Plant is situated in south most costal belt of Tamil Nadu, India. Energy security is a most important factor for both the countries and possibilities of nuclear

theft activities in future is another important factor for the national security of both the countries. The prominence of establishing of Sea Power to country like Sri Lanka is on peak of requirement. 'Development of civil and military maritime capabilities in a country is a main approach to the success of operations' was the argument which writer was attempting to build up in above paragraphs.

When focusing for above threats and challenges to the island the lack of mutual understanding between maritime affiliates can be identified. Further the lack of Maritime Domain Awareness was key area which writer has observed which required upgrading. Subsequent contents writer will be specifically focusing on lapses in costal security mechanism and requirement of national plan to achieve maritime domain awareness.

D. Collective Plan to Achieve Maritime Domain Awareness We have to learn from the history. Joint operation conducted by tri forces was one of the key factors of success to defeating of terrorism in Sri Lankan soil. With the existing non-traditional security issues, this is the high time to implement national strategy for maritime security combining all maritime components. To achieve this strategy, mechanism for maritime domain through collection, integration and dissemination of surveillance data and intelligence is enabling to formulate. Writer will be focusing of formulating "Maritime Domain Awareness Center" to achieve above national plan. This will enable operational commander to detect, deter and interdict adversaries. The center will be core unit to collect all the data together and analyzing of it to implementing counter strategies for threats.

The purpose of MDA is to facilitate timely, accurate decision-making. MDA does not direct actions, but enables them to be done more quickly and with precision (National Plan to Achieve Maritime Domain Awareness, 2015) Writers proposing methods for effective MDA are as follows.

- Information and surveillance data gathering from various sources of maritime affiliates need to center in to 'Maritime Domain Awareness Center'.
 Gathering from human intelligence and Surveillance
- The gathered information required to be analyzed via staff officers of different security components.
 (Working Staff of the center need to represent each security component such as Navy, Army, Air

force, Police, Coast guard, Custom, Immigration and Emigration, Department of fishery etc.)

- The staff officers required sharing the information and data among the security affiliates and decisions must take quickly and with precision.
- Processed intelligence must prioritized according to threat axis to the country and disseminate in to the relevant authority. According to the intelligence reports naval and commercial operations can be implemented. (To established Sea Power around island)
- Further gathered intelligence required to forward to strategic decision makers to create national policies. This level the change of strategies with combination of operational level decision makers in essential. (Discussion of lapses in costal security arrangement architecture such as modern surveillance equipment's, MPAC, OPV, Fishing boats-commercial operations, etc)

With process of above steps quick, accurate and timely results can be achieved by security components. This will enable to establish Sea Power around waters in Sri Lanka. It's a fact that understanding of theories and concepts under 'Security' to an island nation like Sri Lanka is very important to formulate combine strategies to counter vulnerabilities to the country.

III. CONCLUSION

Sri Lanka navy is the outer most defence component which provides security to the country. The holistic view of theories under 'Security' is helpful to understand the realistic nature of the existing security issues. The identification of possible traditional and none traditional security issues to the country in precise time is vital important to create policies by the strategic level decision makers. Naval warfare is an art and deep study of military strategies by practitioners is one of the important factors for the security of the county. To prove that Naval and Commercial Operations is core factors to establish 'Sea Power' in our waters. With the experience gained during last thirty years of war navy was able to develop their skills and capacity in a considerable way. This experience was not gained within single day of military campaigns. Navy was able to develop their weapon capabilities and platforms of fighting to counter maritime terrorism. Further they applied the lessons learnt from military history from the

World and Sri Lankan sources. With that immense exposure, Navy must be able to act as initiating authority to implement 'Maritime Domain Awareness Center' combining other security components in the country.

The significance of naval contribution to strengthen the national security of Sri Lanka clearly needs to be identified. To achieve this success formulating of combine maritime awareness center was the core unit that writer tried to convince in this paper. The expected areas to be developed are new surveillance technology, sharing of information and data among security components, knowledge of security human and naval diplomacy. When achieving those elements maritime cooperation, sharing of intelligence and data across borders and sectors, joined maritime domain awareness, Combine exercise with security components are some of the activities which are expected to carry out. The development gained by Sri Lanka navy to achieve the national requirement of the country was highly recommended and appreciated by the people and government of Sri Lanka with the victory gained in history. As military historian Clazuwitze said for a victory, country mainly needs to have three factors. Namely support from the respective government, support from the people of the country and military will to win. Sri Lanka navy was able to have these components to their success in maritime warfare. So this is the time Sri Lanka navy to initiate this new concept of 'Maritime Domain Awareness Center' by combination of essential security components. This strategy will help to ensure gap free costal surveillance to island nation of Sri Lanka.

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