

# ROLE OF THE COAST GUARD IN MARINE ENVIRONMENT SECURITY :

## THE P<sup>3</sup>C FACTORS

(Paper presented by  
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National security is everyone's business, because everybody is a beneficiary to it. The way to maximise it is through a grand strategy integrated into the system of governance, and national character by the government, though. The subject of this workshop—**oil spill management**—actually is a humble projection of our desire to make a difference in this regard: maximising national security and protecting it. In fact, there is more to it than oil spill management within the chosen title of this workshop that this forum is going to contribute. I am sure we can achieve the desired objects at the end of it.

Environment security is one of the elements of national security. The elements are not stand-alone entities; they are mutually inclusive. They are constantly evolving variables with terrain specific characteristics.

In a living planet, environment means the aggregate of all-external conditions and influences affecting the life and development of organisms. In the recent past, attention of the world has been focusing on major environmental degradation issues like deforestation, acid rain, depletion of the protective ozone layer, ocean pollution, and global warming among others. The seriousness of these debates for anybody will be understood from the fact that environmental damage can permeate through national confines.

Environmental damage due to war and military preparations, and using environment as a weapon of war are not strange issues. It has an ancient beginning when the Romans destroyed the fields of Carthage by spreading them with salt. Damages caused in Vietnam during the prolonged war, experiments in climate control as a weapon of war during the Cold War period and

intentional discharge of oil into the Persian Gulf during the Gulf War are examples. Such incidents point out that we cannot discount intentional spills in the marine environment. It could come up as an act of war or militancy, or just for economic reasons. The cautious interest in environmental damage and its effects to national security also comes from the fear of a prolonged nuclear winter that the world may face in the aftermath of a nuclear war. In a large-scale nuclear war, the resulting smoke and dust can radically alter the climate conditions of the earth.

These introductory passages are just to invite your attention on the matter of environment security and its interactive matrix with other elements of national security, important among them being military security, economic security, resource security, and energy security.

For the Indian Coast Guard, marine environment security is a wholesome concept. It is a statutory function defined in the Coast Guard Act, 1978. The Coast Guard identifies marine environment security through four activities:

- Protection of marine environment,
- Preservation of marine environment,
- Prevention of marine pollution, and
- Control of marine pollution.

This is termed as the **P<sup>3</sup>C** factors of environment security. It is not related to a single activity like climate change. It involves any activity that will damage the marine environment. For example, it could be associated with red tide caused by blooming algae that can asphyxiate the fish population. It covers a wide range of concerns.

Ocean by itself is a unique terrain. It is multi-dimensional. It has the surface, the ocean layer, the interfacial zones with air and land, and finally the depth—the large abyss of treasure. It is vital to a maritime nation. It is the only geographical terrain that provides the advantage of wealth and absolute stealth at the same

time. Taking into consideration all the factors that govern the maritime security, I had defined the concept in a research thesis as the **all-encompassing complementary faction of national security of a maritime nation from an ocean specific terrain assessment applicable to that nation**. The essence of the ocean to humankind has been considered widely by a generic term, ocean wealth that under the concept of geoproductivity can be amplified as **ocean property** to include all the variables that contribute to maritime security :

- Ocean resources
- Ocean advantage
- Ocean environment, and
- Oceanic islands

It was identified by research. I do not intend to amplify it further. Ocean property here is the collective term for the interrelated and interactive variables within it. Ocean environment transcending to marine environment in our reference here is the entity that needs to be preserved and protected under the **P<sup>3</sup>C** principles of the Coast Guard.

The Coast Guard is the coordinating authority for the **P<sup>3</sup>C** aspects of marine environment security according to the Act. The marine environment security, therefore, is one of its statutory duties. Since its formal inception in 1978, the Coast Guard has come a long way in marine environment security, especially in oil spill response management. But it needs to evolve further and develop its capabilities to envelop the entire **P<sup>3</sup>C** aspects. Being the national coordinator in oil spill response, it has a variety of responsibilities under the National Oil Spill Disaster Contingency Plan (NOS-DCP). It is the coordinator for oil spill response in the entire maritime zones of India with specific allocation for direct response functions in the maritime zones outside the port limits and notified areas around offshore oil facilities. This is a dual responsibility in which it has to develop its response capabilities and the prowess for coordination through various resource agencies and governmental set up. It is being done through regular coordination, exercise—jointly or otherwise, and annual NOS-DCP meetings. Notwithstanding response action, it has the additional task of monitoring and surveillance both surface and aerial.

The responsibility under the **P<sup>3</sup>C** concept is much larger. It covers total marine environment security. The Coast Guard needs to develop an edge towards this objective in its doctrinal approach to the problem. Technology, especially space applications will be a major contributing factor.

India is an active partner in the South Asian Seas Programme of the United Nations through which it has been involved in developing a regional contingency plan for South Asia for combating oil and chemical spills at sea. The nodal agency is the Department of Ocean Development. The Coast Guard is a party to the plan. Once established, it is expected that there will be bilateral cooperation between the South Asian maritime states in oil spill response in the area. The Coast Guard needs to be prepared for it.

Indian Coast Guard regularly participates in joint exercises with the Maldivian Coast Guard in which it also tests its joint capabilities in combating oil spill at sea. This is in addition to imparting training to their response personnel on request.

India is also active in the meetings of the Marine Environment Protection Committee (MEPC) of the International Maritime Organisation (IMO). The nodal agency is the Ministry of Shipping. The Coast Guard is represented in the Indian delegation. The Coast Guard's draft report presented for information on implementation of the Oil Pollution Response and Preparedness Convention (OPRC) and the OPRC-HNS (hazardous and noxious substances) Protocol and Relevant Conference Resolutions annexed to this paper will give more information on the subject. Besides, the Coast Guard is currently studying the progress in India on bioremediation including phyto-remediation for preparing a report for the next MEPC session. In the MEPC, the Coast Guard is representing the Drafting Group for upgrading the IMO manual on oil spill response and examining the recommendations of France to the IMO on bioremediation. This paper also contains an annex on the country profile of India in oil spill response prepared by the Coast Guard for the International Tanker Owners Pollution Federation Limited (ITOPF) document. These are in addition to the other areas of concern for India in the MEPC. They include recycling of ships, and control of migration of harmful aquatic

organisms through ballast water of ships. Both are subjects of concern for marine environmental security and are handled separately by the Indian delegation dealing with shipping in the MEPC sessions.

The marine environment of Indian Ocean is not well studied. There are periodic reports of metal and oil pollution along the Indian Ocean rim, more particularly in the coastal areas of Persian Gulf, Red Sea, and along the oil tanker routes in the Arabian Sea and the Bay of Bengal. The spill drift can also be seen around the Andaman and Nicobar Islands especially around Port Blair, and Campbell Bay and further down. According to studies, no specific area in Indian Ocean is strictly free from pollution of some kind. It is a serious matter; pollutants do not respect national boundaries.

The Coast Guard is the national agency for ensuring marine environment security in India. It involves protection and preservation of the environment and prevention and control of pollution. As an Armed Force of the Union it has the discipline, determination, and drive for it. It needs to develop its capabilities, expertise, and interactive prowess towards this object. It will be able to do so with a doctrinal approach well supported by the government. Towards this, I invite this workshop to take note and include in the resolution for technological, administrative, scientific, and legal empowerment of the Coast Guard on priority, supported by adequate funding and decentralised authority. Here the emphasis is varied; technology, law, and funding are the key factors. In a doctrinal approach environment security at the national level should be seen separately with marine environment security as part of it. Evolution of marine environment technology is vital to this doctrine. The doctrinal approach can identify the domains through which the goal of environment security can be achieved. Oil spill management is complementary to this goal in such an approach. It is vital to wealth generation and protection in the overall scenario.

The Coast Guard has its commitment towards this goal. It needs the support from the government and concerned agencies, that I am sure this workshop will take note.

Thank you.

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