Non-Traditional Security Threats in Maritime Zones of Pakistan and Law Enforcement by PMSA: An Overview

Maliha Zeba Khan^a and Muhammad Faisal Sadiq^b

Abstract

The new millennium has witnessed massive international transformations within relations and geopolitics. There is a paradigm shift from traditional to nontraditional in the concept of security and modern warfare witnessed in contemporary era. A notable thing is spatial dimension which can bring significant change to nature of non-traditional challenges and threat perception of states. This paper is an endeavor to evaluate the nature of nontraditional security threats in maritime zones of Pakistan and the legal instruments enabling Pakistan for countering these security threats. Being global commons, oceans are taken as shared responsibility supported the international law and different regulations. There are different legal instruments established to ensure and facilitate effective law enforcement in maritime zones of littoral states. Therefore, in that regard, the undertaken research aims at application of these legal instruments and to seek the role of Pakistan Maritime Security Agency (PMSA) for securing the maritime zones of Pakistan and ensuring safe navigation in its seas. This research is exploratory for which synthesis of grounded research and case study method is used by utilizing primary quantitative and qualitative data besides secondary sources. The identification of a number of non-traditional security

 ^aAssistant Professor, Department of International Relations, National University of Modern Languages (NUML), Islamabad, Email: malihazkhan@gmail.com
^bNaval Officer, Pakistan Maritime Security Agency, Email:

muhammadfaisalsadiq@gmail.com

threats in maritime zones of Pakistan and studying the countering strategies make this research quite relevant as there is massive reliance of states over maritime activities, global shipping and commercial activities through Indian Ocean being primary conduit for economic and communication hub for their sustainable socioeconomic development.

Keywords. Pakistan Maritime Security Agency (PMSA), Nontraditional Security Threats (NTS), Securitization, Maritime Zones, Law Enforcement.

1. Introduction

The end of Cold War has been marked as a milestone not only for international politics, but also academic side, particularly International Relations, Political Science and Security Studies have gone through major transformation. It did not only prove an end to an era full of distrust, proxies, and extending realism-based foreign policies toward other states giving it a certain traditional outlook, rather it became dawning to a whole new era of adding up of nontraditional approaches to national security. There was emergence of new approaches and frameworks to study the transition and transformation in international relations in post-Cold War era. Historically, national security had largely been state-centric, realismbased, military-focused concept with significant attention to landbased relations and politics since the beginning of modern history. Trend reflected shortsightedness regarding maritime domain thus resulting into maritime or sea blindness. Therefore, the core preposition of this paper is following: Non-traditional security threats in maritime realm are different rather graver in nature than such threats on land eventually needing robust national response and strong law enforcement in accordance with international laws and regulations to

counter these threats and to mitigate the consequences for ensuring safe and free navigation of the oceans.

Simultaneously, another cult which has emerged and carries significant value to be studied in this shifting paradigm is geographical realities linked with this emerging discourse. Generally, geography is one of important determinants for states' significant policy choices and decision making. If the state is landlocked, its population, demographic profile, terrain, weather, natural resources, and other realities will determine the course of action and interplay with other actors; but if state is a littoral one, the interplay with other state and non-state actors would take place on basis of distinct geographical realities of oceanic spaces, particularly its policies in the sea would be involving international law and extensive number of actors. Therefore, scope of studying non-traditional security threats and challenges gets more depth in terms of nature, dynamics as well as countering strategies when performed in certain spatial dimension, i.e. land, air, outer space, or maritime with a pertinent role and guidance of international laws

Since Barry Buzan set up five sectors-- military, political, economic, societal and environmental security within existing and largely traditional security discourse,¹ the inclusivity of non-traditional security has taken firm ground in academia and security practitioners.

Generally speaking, 'the military security concerns the two-level interplay of the armed offensive and defensive capabilities of states, and states' perceptions of each other's intentions. Political security concerns the organizational stability of states, systems of government and the ideologies that give them legitimacy. Economic security concerns access to the resources, finance and markets necessary to sustain acceptable levels of welfare and state power. Societal security concerns the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture and religious and national identity and custom. Environmental security concerns the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend." For detail, see Barry Buzan, *People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era.* 2d ed. (Boulder: Lynne Rienner; Hemel Hempstead: Harvester Wheatsheaf, 1991), 19-20.

Intrinsically Buzan has fetched the concept of security well away from traditional military aspect of security and has broadened the concept remarkably. Following Buzan, scholars have identified specific issues within non-traditional security. Cook discusses non-traditional security threats as 'climate change, resource scarcity, infectious diseases, natural disasters, irregular migration, food shortages, trafficking in persons, drug trafficking and transnational crime'² but that was related largely to land. However, despite impressive volume of research about non-traditional security and its different aspects, there had been serious shortcomings regarding extensive research about non-traditional security in the maritime domain, and responsibility of policing and law enforcement in Western Indian Ocean Region (WIOR).

Studying non-traditional security as theory in maritime realm as well as its application and practice in oceanic spaces is really limited yet full of research gaps. It has largely been an ignored area despite the fact that oceans and human beings have been enjoying an inseparable relation ever since the unknown history; and spread of humanity, civilization, knowledge, technology, economy, commerce, energy, food needs, medicines, and all sorts of connectivity and communication have been reliant over the seas and oceans notwithstanding threats and challenges on the way. Historical evidences show that significant number of security threats, natural calamities, disasters, outbreak of diseases in the seas and extended maritime domain had been existent other than traditional threats and attacks by state and non-state entities. The modern era is no different regarding security threats in maritime domain. Rather these threats have become quite extensive and grave in these times.

In recent years, researchers have focused relatively more on these threats in maritime domain like piracy, crimes, smuggling and trafficking, illegal migrations, terrorism, theft or illegal use of marine

² Alistair D. B. Cook, "Non-traditional Security and World Politics," in *Issues in 21st Century World Politics*, 3rd ed. Edited by Mark Beeson and Nick Bisley (UK: Macmillan, 2017), 39-40.

resources etc. Among threats in the seas, piracy is believed to be wide spread with a history in different seas. Piracy as a threat to maritime economic activity and shipping particularly is an ancient phenomenon which has become far more advanced in different regions with technological developments and pirates' hands-on technologies. Susumu exclaims that piracy is defined differently everywhere like Japan considers every attack and even terrorist activity or politicallymotivated attacks on ships in any maritime zones as piracy.³ This is international law which provides guidance to deal with these challenges in a coherent way, involving different mechanisms to ensure safe navigation. However, effective law enforcement is not possible in absence of reliable intelligence. It is exchange of such information at national and international level which enables different actions and operations done by law enforcement agencies (LEAs) and task forces in effective manner. Mak believes that intelligence exchange has become critically important for effective law enforcement due to changing patterns of crimes at sea.⁴

The land and sea are distinctive geographical realms, so is the nature of threats and intensity which is different in both domains. Therefore, the undertaken research is exploratory regarding nontraditional security threats and law enforcement activities in the seas and oceans. The data for this research has been collected through synthesis of primary and secondary sources. Since this is the research being conducted to understand these threats and law enforcement particularly in maritime zones of Pakistan, case study method has been used and Pakistan Maritime Security Agency (PMSA) has been studied and analyzed as the case study and law enforcement agency

³ T. Susumu, "Suppression of Modern Piracy and the Role of the Navy," *NIDS Security Reports*, no. 4, March 2003, National Institute of Defense Studies, Tokyo, 38-58.

⁴ JN Mak, "Securitizing Piracy in Southeast Asia: Malaysia, the International Maritime Bureau and Singapore" in *Non-Traditional Security in Asia: Dilemmas in Securitisation*, edited by Mely Caballero-Anthony, Ralf Emmers, and Amitav Acharya (London and New York: Routledge, 2016), 81.

responsible to secure maritime zones of Pakistan. The theoretical underpinnings have been induced based on securitization theory and to test them in a different spatial dimension from land as typical domain.

The undertaken research paper has been structured under six sections: 1) Securitization Theory and Non-Traditional Security, 2) Non-Traditional Security in Maritime Zones of Pakistan: Conceptual Framework, 3) Maritime Zones of Pakistan, 4) NTS Threats and Law Enforcement in Maritime Zones of Pakistan by PMSA, 5) NTS in Maritime Spaces: Corollaries after Analyzing Theoretical Postulates, and 6) Conclusion.

2. Securitization Theory and Non-Traditional Security

Extending research on non-traditional security threats in maritime space is a question related to securitization of oceans and how to conceptualize and perceive threats related to different sectors. Traditionally, concept of security has been defined in terms of military and political security. Nevertheless, there had been gradual awareness and intellect emerging over other important aspects having impact on the hard-core security paradigm like international regimes, economy and environment. However, it was the era after the Cold War which encouraged academics, policy makers and practitioners to think out of the established norms, traditional security paradigm and warfare. Since then, shifting focus from traditional to non-traditional security has effectively broadened the horizon of international relations, international law, security and strategy related studies.

The redefinition of concept of security by Barry Buzan in post-Cold War period gave a reason to think out of established limits. It was Buzan's theoretical framework of securitization and de-securitization based on identification of five sectors which encouraged academics, practitioners, statesmen, and international organizations to start thinking about threats and challenges coming from other sectors as explained by Buzan et al. This multi-sectoral approach disaggregates the whole concept of security making it more understandable, however, making it more inclusive for other referent objects other than the state,⁵ opening avenues for further research. According to Buzan, "Securitization is understood as the discursive process through which an understanding is constructed within a political community to treat something as an existential threat, and to enable a call for urgent and exceptional measures to deal with the threat."⁶ The process of securitization has been aimed at bringing attention towards those issues which could become serious at any point of time, making it an emergency situation and a serious security concern. Buzan believes that securitization is politicizing of any, previously apolitical issue in any sector, i.e. politics, military, economy, society or environment, beyond the normal limits to reflect it as an emergency situation requiring urgent action.⁷

Being a constructivist approach by Copenhagen School of thought, the securitization theory acts both at macro and micro levels. At macro level, securitization theory acts largely as a meta-theory guiding about the way 'to see and talk about security' focusing on looking beyond objectivism and encouraging further constructions about newer realities 'different from a reflection of some material development' which supports adding up of sectors and widening the scope of security studies from traditional to non-traditional. At micro level, the theory supports deep understanding when it needs to go to specific issue from generalized one for purpose of research or analysis. At this level, securitization theory is utilized and threat is constructed.⁸

According to Buzan, non-traditional security issues can be placed in quite broader manner on suggested spectrum of five sectors as required by circumstances, but that could vary state to state, time to

⁵ Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* (Boulder, London: Lynne Rienner, 1998), 8.

⁶ Barry Buzan, "Asia: A Geopolitical Reconfiguration" barrybuzanengpe22012.pdf (ifri.org)

⁷ Buzan et.al., *Security: A New Framework*, 24.

⁸ Barry Buzan and Ole Waever, *Regions and Powers: The Structure of International Security* (Cambridge and New York: Cambridge University Press, 2003),

time, and issue to issue. There is higher possibility of substantive difference of opinion regarding existential threat, e.g. religion, social issues, environment. And inclusion of non-state actors has given chance to such entities to securitize any issue as existential threat making it so in absolutely non-traditional way.⁹ But as part of process, de-securitization of previously constructed reality or threats or securitized agendas eventually would need to be done which is basically normalizing of securitized issue and putting it for political bargaining process.¹⁰

When securitization in one sector is done, it creates chain reactions on other sectors too and can change order or interplay of actors substantially, sometimes needing to override binding rules at internal level. Since securitization in sectoral arrangement is done for clarity and understanding of interaction between or among units, there can be two response or correlations of this process. First is that the units and their characteristics belonging to certain sector are identifiable, but can be present in other sectors too. Secondly, description of security in terms of survival as well as threat or constructed reality as explained by Buzan et al. can be different depending upon circumstances across these five sectors,¹¹ hence providing ample space for research on the sector-based securitization or non-traditional security threats in maritime zones of Pakistan.

3. Non-Traditional Security in Maritime Zones of Pakistan: Conceptual Framework

Since Pakistan borders Indian Ocean at strategically important coordinates; there comes a great responsibility on Pakistan to deal with a number of non-traditional security threats, e.g., piracy, blue crimes

⁹ Buzan et. al., Security: A New Framework, 23-5.

¹⁰ According to Wæver, desecuritization is the "shifting of issues out of emergency mode and into the normal bargaining processes of the political sphere," as quoted in Buzan et. al., *Security: A New Framework*, 4.

¹¹ Ibid.

like gun running, arms smuggling, abductions, theft of marine resources, maritime terrorism, environment related issues, contraband economic activities, transnational organized crimes, cyber threats etc. in its maritime zones to ensure good ocean governance and 'order at sea'. The concept of good and stable 'order at sea' has intrinsic linkage with safe and secure navigations of the seas, and uninterrupted global flows to ensure states about their national interests related directly or indirectly with maritime domain. According to guiding definition given by Council for Security Cooperation in the Asia Pacific,

"Good order at Sea ensures the safety and security of shipping and permits countries to pursue their maritime interests and develop their marine resources in an ecologically sustainable and peaceful manner in accordance with international law."¹²

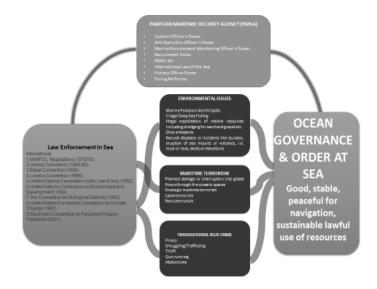
Therefore, any threat to global flows, particularly economic activities and commercial flows like shipping would be considered threat not only to states' economies but international order at sea. These threats are sporadic in nature, nonetheless by and large linked with non-traditional security description. Theoretically, non-traditional security is addressed under five sectors, but when theory is applied in maritime domain, different dimensions do emerge due to entirely different geography than land mass and its related realities. The undertaken study shows that non-traditional security threats in maritime zones can generally be analyzed under three sectors, i.e., economic, societal and environmental security, whereas remaining two domains, political and military security do grey out and lose their distinct posture due to national and international laws as regulatory mechanisms within oceans. Every major issue emerging in maritime spaces do have impact on sustainability of economy of state, social progress and societal growth and development, and everything taking

¹² Principle for good order at sea," Council for Security Cooperation in the Asia Pacific, accessed on July 12, 2021, CSCAP - Principle for good order at sea.

place in those waters do have certain impact on marine environment. All three sectors are directly or indirectly affecting socio-economic conditions of littoral states, and similar is the case with Pakistan.

For the undertaken research, the non-traditional security threats in maritime zones of Pakistan have been identified under three headings- environmental issues, maritime terrorism, and transnational blue crimes, which are dealt by Pakistan Maritime Security Agency (PMSA) which is civil armed force working under Ministry of Defense with legal support through the Act of Parliament, passed in 1994 as PMSA Act, further supported by international instruments for the purpose.

Following infograph reflects complete conceptual framework of this research:¹³



PMSA focuses on ensuring peace and good order at sea through a mechanized, well-equipped and well-organized force. While at same time with maintaining deterrence at sea by catching illegal

¹³ Both authors have created this infograph for the purpose of clarity and understanding about the research after extensive deliberations.

narcotics and smuggling of goods in and out of Pakistan, human rights and welfare goes hand in hand with law enforcement and PMSA does it all. Owing to its civil outlook and a sole law enforcement agency in maritime zones of Pakistan, the agency plays an immense role in situations of distress, and extends search and rescue efforts and humanitarian assistance.

3.1. Environmental Issues

Environmental issues do come on top of concerns at the nontraditional security matrix. Since oceans are great source of economic activities and a wide range of communication and global flows do take place through maritime zones, marine environment and sustainable ecology have emerged as a priority for littoral states and other stakeholders. There can be established a laundry list of non-traditional maritime security issues which include illegal, Unreported and Unregulated (IUU) fishing, and use of prohibited equipment for the purpose of fishing. There are pollution-related issues coming from shore to sea, and marine pollution like oil spills and vessel emissions. The illegal exploitation of marine resources including dredging for sand and gravel ruining ecological balance has emerged as an intense challenge. This list includes natural disasters or incidents like tsunami, earth quakes, eruption of sea mounts or volcanos resulting into major challenges for states as well as maritime economic activities. There are geographical changes like appearance or disappearance of atolls or elevations as a regular feature of the sea but with serious implications if not assessed, documented or shared properly with other departments and stakeholders. Hence all legal and illegal activities do have implications which need to be studies.

Notably, such endeavors at sea at times result in continuous yet unpredictable challenges which require humanity-based decision making like helping out vessels in distress without discriminating on basis of legal or illegal activities. Such search and rescue missions of people and vessels to save them from situations of crisis at sea. These issues do come under maritime safety by definition, but have implications for state and non-state actors with their stakes involved in maritime milieu.

3.2. Maritime Terrorism

Maritime terrorism is an umbrella term which is being securitized by different entities now. Oceans as hub of numerous activities including military, economic, social, and political ones, and SLOCs and ISLs beside ports and harbors are considered easy access if any terrorist activity would be planned by terrorists. Although terrorist incidents in maritime spaces are not widespread, there have been steady flow of activities which are alarming, and several other scenarios as existential threats can be constructed in line with implicit gaps in security mechanisms. The UNODC considers any damage or terrorist attack, armed robberies, acts of violence which could harm its safety or sink, destroying cargo, and trying to seize and control the vessels, ships and fixed platform like rigs, oil terminals, pipelines, and fiber optic cables as maritime terrorism.¹⁴ Besides intentional or planned damage or interruption into global flows passing through oceanic spaces, there are also emerging types of terrorism which can prove challenge in future. There might be incidents of strategic maritime terrorism taking place if any mercenary or terrorist group with its roots in land like ISIS, or Tamil Sea Tigers or any other group plans terrorist activity against any port, strait, or any particular ship carrying certain cargo or even use fake flag or the sake of confusion pitch stateless vessel to instigate conflict. Another potential maritime threat is cyber threat including GPS/AIS spoofing incidents taking place even at high seas, manipulation of Global Navigation Satellite

¹⁴ The global framework against maritime terrorism in the international legal context" Workshop for ASEAN Member States by UNODC, Singapore, June 09, 2009, Microsoft PowerPoint - Walter Gehr & Stefano Betti - Singapore 09062009 general.ppt (unodc.org).

System signals,¹⁵ and similar kind of threats to reroute the ships toward the directions the perpetrators want them to go and prey. Similarly, narcoterrorism can take place and cause lethal clash between mafias and security agencies.

3.3. Transnational 'Blue' Crimes

Transnational 'blue' crimes are very broad in nature including piracy, smuggling and trafficking, theft, gun running, abductions for ransom etc. Piracy is one threat which is looming around since ancient times. In contemporary era, piracy has not remained only about looting of the vessels but in several incidents, kidnappings and even killings of the seafarers also took place in certain regions of Africa and Southeast Asia within IOR. Piracy has gone through confluence of motives and interests quite dramatically, and focus has shifted from cargo to seafarers. Similarly, pirates have potential to act as mercenaries for terrorism, facilitators to illegal migrations and other transnational crimes. Smuggling and trafficking of contrabands are not only threat to legal economies, but society gets affected. Similarly, other crimes occurring across the oceans, whether done by transnational organized criminal groups or lone operators are equally problematic. Dealing with such issues could prove a gruesome task making law enforcement in maritime zones challenging as there are hurdles at structural level, as well as geopolitical complexities make curbing these menaces difficult

4. Maritime Zones of Pakistan

The United Nations Convention on Law of the Sea (UNCLOS) which designates different maritime zones to littoral states subject to their national jurisdiction and establishes grounds for regulating the

¹⁵ Center for Advanced Defense Studies (C4ADS) that Russia has been doing so since 2016, as quoted by Gary C. Kessler, "GNSS/AIS Spoofing: Issues in Maritime Cyber Security," June 15-17, 2021, "GNSS/AIS Spoofing: Issues in Maritime CyberSecurity" by Gary C. Kessler - YouTube.

maritime spaces due to their attribute of global common from where the concept of shared responsibility of mankind regarding oceans comes afore. For Pakistan, there is 290,000 square km of maritime zones which are regulated and provided with security to facilitate safe navigation and other economic activities. The first 12 nautical miles (NM) are called territorial waters or territorial sea of Pakistan which makes first maritime zone. The state has complete sovereign rights and jurisdiction over its territorial waters, but other states and their ships have the right of innocent passage, but littoral state enjoys certain rights too. If there is a warship not in compliance with the state laws can be asked to leave. Next 12 NM make up contiguous zone from where international waters start, and states have to follow international laws to regulate activities and navigation in these zones. However, from baseline till 200 NM is considered as Exclusive Economic Zone.

The Continental Shelf of Pakistan comprising upon additional 150 NM to the then existing 240,000 sq. km was awarded 2015,¹⁶ for which Pakistan had submitted its claim for grant of Continental Shelf to the Commission on the Limits of the Continental Shelf in April 30, 2009 according to the UNCLOS Article 76, paragraph 08.¹⁷ It added 50,000 square km making it 290,000 sq. km. of area as 350 NM of maritime zones of Pakistan.

¹⁶ Continental Shelf, *Dawn* (Karachi), March 27, 2015, Continental shelf -Newspaper - DAWN.COM.

¹⁷ Commission on the Limits of the Continental Shelf (CLCS) Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Islamic Republic of Pakistan," updated on May 06, 2015, accessed on April 22, 2021, Continental Shelf submission to the Commission by Pakistan (un.org)

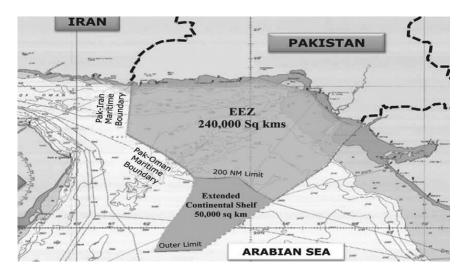


Figure 01. Exclusive Economic Zone and Continental Shelf of Pakistan Source: Pakistan Maritime Security Agency

5. NTS Threats and Law Enforcement in Maritime Zones of Pakistan by PMSA

Intrinsically law enforcement to maintain order at sea and to govern oceans is established through legal adherence of national and international laws and regulations by littoral states in their maritime zones. Since the undertaken research is aimed at understanding nontraditional security threats and law enforcement in maritime zones of Pakistan, it establishes clear grounds for understanding of ocean governance in larger part of WIOR which as a region has attracted much international attention because of its geostrategic location and economic activity and connectivity through SLOCs (Sea Lines of Communication) and ISLs (International Shipping Lines) besides securitization of this oceanic space.

5.1. Legislation/Legal Support

Pakistan signed the UNCLOS in 1982 along with other countries; wherein it was ratified in 1997. Taking the advantage of this Convention, Pakistan initially declared its baseline and territorial

waters, contiguous zone, and EEZ. After that, the delimitation of maritime boundary with Iran and Oman took place between the years 1997 and 2000. On the other hand, maritime delimitation with India is still pending due to land boundary issue over Sir Creek.¹⁸ After ascertaining the maritime zones of Pakistan, there was the need to raise a force for law enforcement at sea which was established in 1987 with the name of Maritime Security Agency (MSA). The newly established force (MSA) was provided with legislative justification in 1994 when its Act was passed by the parliament. To give the organization a distinctive identity, 'Pakistan' was prefixed with the name of MSA; thereafter, MSA was renamed as Pakistan Maritime Security Agency (PMSA).

PMSA performs its roles and tasks as per PMSA Act of 1994 which gives it necessary legislative support to work as Federal Agency.¹⁹ PMSA's tasks and operations are aligned with international laws/ conventions and agreements ratified by Pakistan to regulate role of the said agency. Among these, IMO Regulations, Safety of Life at Sea (SOLAS) – 1974, United Nation Convention on Law of Seas (UNCLOS) – 1982, International Convention on Marine Pollution (MARPOL) – 1973/78, Pakistan Territorial Water & Maritime Zone Act 1976, Customs Act 1969, Exclusive Fishery Zone Act 1975, Prevention of Smuggling Act 1977, Pakistan Environmental Protection Act 1997, Control of Narcotic Substances Act 1997, Prevention of Trafficking in Persons Act 2018, and National Marine Disaster Contingency Plan 2019 are highly significant in guiding PMSA's duties and responsibilities in light of instruments of international laws.

¹⁸ Pakistan and India have territorial dispute over a marshy land between Gujrat (India) and Sindh (Pakistan) which extends to Sir Creek between the two states. For details, see Sajid Mehmood Shahzad, *Impact of Pakistan Maritime Affairs on Blue Economy in Backdrop of CPEC* (Lahore: MQ Printers, 2020), p. 42, 167-174.

¹⁹ Article 3, para (1) of PMSA Act 1994 declares constitution of PMSA an agency by Federal Government.

5.2. Functions and Responsibilities of PMSA

PMSA Act 1994 ascertains twelve functions of the agency in article 10, para (2) which are required to be performed to maintain good order at sea as the end. These tasks legalized by national laws and supported by international laws are different dimensions of law enforcement and humanitarian assistance to people or vessels in distress without any discrimination. These twelve functions have a vast array of impact in terms of ensuring non-traditional security in maritime zones of Pakistan. The responsibilities and functions of PMSA, in the light of the PMSA Act can be identified as; i. Assisting and coordinating SAR in the assigned area, ii. Preventing unauthorized exploitation of economic resources, iii. Protecting Pakistani fishing vessels and crew, iv. enforcing national and international laws, agreements and conventions, v. Undertaking counter-narcotics and anti-human trafficking/ smuggling operations, vi. Assisting other departments and agencies in safeguarding and protecting offshore installations/ infrastructures in the EEZ, vii. Acting as coordinating agency for prevention and control of marine disasters including pollution, viii. Providing assistance for hydrographic and oceanographic research, ix. Providing assistance for oil, gas and other mineral exploration, x. Rendering assistance to other assessment agencies in acquisition of mineral exploration and seismic data etc., and xi. Providing an effective secondary maritime force for deployment in any emergency, war or conflict.

5.3. Additional Legal Powers to Deal with NTS Threats

In addition to responsibilities defined in PMSA Act 1994, PMSA officers are delegated with legal powers of Customs Officers (Customs Act 1969), Fishery Officers (Exclusive Fishery Zone Act 1975), Police Officers (Police Act 1861 & Code of Criminal Procedure 1898), and Environmental Protection Officer (PEPA Act 1997) to facilitate legal procedures undertaken in maritime zones of Pakistan.

5.4. PMSA Contributions in Maritime Security Operations (MSO)

Non-traditional maritime security requires a range of actions and operations with the purpose to ensure utmost secure and safe environment for economic activities, safe navigation, research activities, and good order at sea. Within Pakistan's maritime zones as well as in assigned Area of Responsibility by IMO for humanitarian operations, PMSA makes sure that safety, security and economic interests of Pakistan are not infringed upon by any state or non-state actor/s by continuous patrolling, surveillance and conducting maritime security operations (MSO) in these areas for Search and Rescue (SAR), anti-poaching, anti-marine pollution, anti-narcotics, antismuggling, and miscellaneous tasks undertaken. The role and efficacy of PMSA can be assessed through following data:

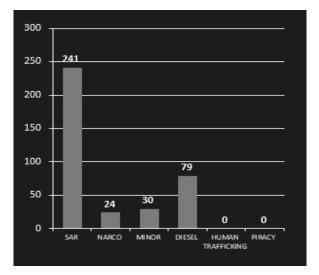


Figure 2: Total Number of Operations Conducted by PMSA (From 1987-2021)

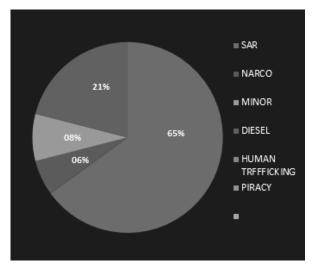


Figure 03: Percentage of Incidents Handled by PMSA Source: PMSA official data sources.

'Minor' indicates at cases of child labor rescued from boats and vessels, whereas major cases of smuggling of narcotics and diesel have been mentioned as 'Narcos' and 'Diesel' in above charts.

5.4.1. Search and Rescue (SAR)

Pakistan being signatory to SOLAS Convention has been allocated a vast area extending up to 840 NM for coordination of Search and Rescue operations. In line with international obligation of Pakistan, PMSA also provides human resource to Maritime Rescue Coordination Center (MRCC) 24/7 for responding to all kinds of maritime disasters in the region. From 1987 till 2020, PMSA has rescued more than 2513 precious lives and responded to 202 vessels in distress at sea which include fishermen from regional countries, even belonging to India and Iran.

5.4.2. Anti-Poaching Operations

Preservation of Pakistan's EEZ with respect to Illegal, Unreported and Unregulated (IUU) fishing as well as illegal deep-sea

fishing in enormously rich, both living and non-living resources, is one of PMSA's prime duties. Poaching, mainly by Indian fishermen, is common in Pakistan's resource rich Indus Delta region. Based on Pattern of Life (POL) data of last five years (July 2016- July 2021), it has been observed that on average approximately 1150 boats are reported every year within Pakistan's EEZ, out of which 55-60 boats are apprehended by PMSA surface units; while others are repelled outside EEZ even before they start catching fish from maritime zones of Pakistan. Calculations based on average fish catch per boat and cost of fish per kg reveal that potential loss, if not thwarted, could range from approximate PKR 1.0 to 2.66 billion per annum for stolen natural resource, besides damage to eco-system and sustainability which is not calculable numerically. Since establishment of PMSA, this potential loss has been progressively averted. There have been 8841 fishermen apprehended mainly from Eastern region of EEZ. With efforts of PMSA, a total amount of approximately PKR. 427 million has been deposited in Government of Pakistan's treasury. These calculations are based on the agency's detection and actual number might be much more. In order to conserve fish resource in Pakistan's waters, over 5000 banned nets have been confiscated by PMSA during the year 2021. It would be extremely difficult to estimate net worth of our fish resource exploitation by unauthorized fishing trawlers and boats prior establishment of PMSA.

5.4.3. Anti-Marine Pollution

Pakistan faces a complex situation due to severe marine pollution, especially in Karachi Harbor. Coastal development activities have also accelerated impacts of pollution leading to deterioration of coastal environmental quality, depletion of coastal resources, public health risks and loss of biodiversity to be brief. PMSA undertakes pollution control in Pakistan's maritime zones through effective monitoring and surveillance. In addition, PMSA enforces Port State Control measures in which regular checking of vessels is undertaken through inspection of wastes & garbage records onboard to control pollution within ports and harbors in order to protect its marine environment and port and harbor installations besides overall environment.

5.4.4. BARRACUDA Exercises

As an aftermath of grounding of MT Tasman Spirit at Karachi Port in 2003, and later on oil spillage on shores of Karachi, the National Marine Disaster Contingency Plan (NMDCP) was developed in the year 2007 to deal with such incidents. To rehearse responses as per national strategy, PMSA conducts international oil spill exercise named as BARRACUDA, which provides all stakeholders a common platform to practice response mechanism. PMSA has conducted a series of eleven BARRACUDA exercises till January 2022. In last exercise of BARRACUDA series, over 15 countries and 35 national stake holders/ agencies participated in exercise to broaden the spectrum and enhance regional cooperation.

5.4.5. Anti-Narcotics/ Smuggling

Serving the citizens and coastal communities is one of the core functions of PMSA. This includes getting rid of narcotics from Pakistani society. Since war-torn Afghanistan has been source of large amount of cultivation of illicit opium and production of narcotics at global level, countering narcotics efforts on land are much easier and cost effective as compared to maritime domain. However, PMSA takes up this responsibility at sea zealously despite threats of narco-terrorism and other challenges in operations of interdiction of drugs at high seas due to high volume of sea traffic, multitude of containerized cargo and vast extents of sea open in all directions. PMSA has apprehended approximately 137 tons of various drugs including heroine and crystal meth worth approximately PKR. 83 billion from 1990 till July 2021. Anti-Narcotics efforts of PMSA have also been acknowledged in *Compendium of Drug Seizures at Sea* published jointly by Combined Maritime Forces and United Nations Office on Drugs & Crime. Smuggling of goods and humans including illegal immigrations have gained significant attention during last decade. PMSA has conducted 228 successful anti-smuggling operations including 24 cases of narcosmuggling, and seized various kind of illicit cargo including liquor and illegal fuel having street value of over PKR. 15 billion.

5.4.6. Miscellaneous Tasks Undertaken

As per the Act of 1994, PMSA undertakes other significant tasks, i.e. anti-human trafficking through sea routes, anti-piracy operations, and discouraging child labor. Since PMSA is responsible for securing socioeconomic capital, the agency keeps close check on these issues, particularly discourages employing of minors/children in any capacity at boats and ships.

6. NTS in Maritime Spaces: Corollaries after Analyzing Theoretical Postulates

With evolution and advancement in means of communication and increased volume of trade, Sea Lines of Communication (SLOCs) besides the maritime zones of states have been marked with intense activities like shipping, fishing, exploration and exploitation of marine resources, and enhanced role of state and non-state actors including multinational companies (MNCs), law enforcement agencies, navies, international and regional task forces, researchers, smugglers, traffickers, or other transnational organized criminals within the oceanic spaces giving birth to multiple threats and challenges which are overwhelmingly non-traditional in nature, making it enough reason to research in these dimensions.

Empirically the five sectors mentioned by Buzan do not remain equally distinct when applied in the maritime space due to oceans being global common which limits littoral states' responses to the emerging threats and challenges. Hence the first corollary which comes afore in this research is spatial dimension which does determine the level or sectors of non-traditional security in specific space or domain like land, air, space, or sea maritime.

The second corollary is potential of greying out of political security limits when non-traditional security threats emerge in oceans. This greying out of limits or sectors is unique angle emerged in theoretical postulate of Buzan having serious repercussion. The understanding of ownership and rights over national territory changes dramatically in the oceans. Despite the fact that every littoral state has its territorial sea of 12 nautical miles with complete jurisdiction over it, it cannot restrict any ship particularly trade ships from passing through that zone due to their intrinsically accepted 'right of innocent passage'. Similarly, every vessel has principle right of freedom of navigation through Exclusive Economic Zone (EEZ), Continental Shelf or other special zones of littoral states, as well as 'transit passage' through straits. That usage of maritime zones does not damage political independence or territorial integrity of littoral states until there is external aggression or other questionable conditions harmful to the referent states' national laws and rights over maritime zones under the 'United Nations Convention on the Law of the Sea (UNCLOS)'.²⁰

The third corollary is diffusing or diminishing boundaries of military security in maritime or oceanic space which may have a broader role in certain conditions. The determining factor is nature of calamity in sea and requirement of humanity-based action which might not wait for formal orders by the relevant department if someone or any vessel will be in disastrous situation amidst the seas. Naval forces can be sought to assist civil_armed forces or law enforcement agencies in maritime zones in terms of expertise, training, intelligence or

²⁰ The official draft and relevant details can be seen at United Nations Convention on the Law of the Sea - Main Page.

equipment. Similarly, there are some threats which are non-traditional in nature like acts of terrorism but may require naval forces' assistance due to its graver threat to national security.

There comes up another noteworthy, thence fourth corollary too when Buzan's securitization theory and its five sectors are applied on maritime space that besides inclusivity of other actors as referent objects like international agencies, states do remain as a referent object in terms of law enforcement in maritime zones of Pakistan. That reflects constructivist nature of securitization which enables number of actors including state machinery and international agencies to perform as referent objects. Nevertheless, the undertaken research is reflecting four corollaries within theoretical framework of Buzan and the fundamental concept of non-traditional security.

7. Conclusion

The emergence of concept of non-traditional security (NTS) has changed security paradigm by inclusion of ideas like human security, environmental security, economic security, health-related issues and communicable diseases, ideologies, cultures etc. which were once totally unconceivable as security issues on comparison with traditional security with overwhelming role of military aspect and political power in that discourse. Further shift comes within the discourse of NTS when spatial dimension like land, maritime, air or space is associated to study nature of these threats making it more relevant for states and non-state actors to determine and administer their role. However as mentioned previously as four identified corollaries during the undertaken research, even theoretical postulate has certain capacity to construct further realities to extend the grounds of NTS discourse on the basis of spatial dimension. Since law enforcement in the sea is challenging task keeping in view nature of threats which are more non-traditional than traditional security issues. In case of maritime zones of Pakistan, the responsibility of law

enforcement and maintaining of good order at sea for the purpose of safe navigation and other activities stays with Pakistan Maritime Security Agency (PMSA) by and large. This task is divided and subdivided into various components supported and guided by national and international legal instruments providing well-deliberated strategies to counter all issues and scenarios to deal with NTS in these zones. PMSA not only ensures safe and secure navigation and stable order in Pakistan's maritime zones having area of 350 NM, but additional responsibility of Search and Rescue (SAR) operations is also performed till 840 NM under SOLAS. Nevertheless, inclusion of NTS in security discourse has provided enough ground for effective role of PMSA to deal with various challenges, and has helped relevant stake holders to stay functional in peaceful maritime zones of Pakistan.

Bibliography

- According to Wæver, desecuritization is the "shifting of issues out of emergency mode and into the normal bargaining processes of the political sphere," as quoted in Buzan et. al., *Security: A New Framework*, 4.
- Alistair D. B. Cook, "Non-traditional Security and World Politics," in *Issues in 21st Century World Politics*, 3rd ed. Edited by Mark Beeson and Nick Bisley (UK: Macmillan, 2017), 39-40
- Article 3, para (1) of PMSA Act 1994 declares constitution of PMSA an agency by Federal Government
- Barry Buzan and Ole Waever, *Regions and Powers: The Structure of International Security* (Cambridge and New York: Cambridge University Press, 2003)
- Barry Buzan, "Asia: A Geopolitical Reconfiguration" barry buzanengpe22012.pdf (ifri.org)
- Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework* for Analysis (Boulder, London: Lynne Rienner, 1998), 8.
- Both authors have created this infograph for the purpose of clarity and understanding about the research after extensive deliberations.

Buzan et. al., Security: A New Framework, 23-5

Buzan et.al., Security: A New Framework, 24.

- Center for Advanced Defense Studies (C4ADS) that Russia has been doing so since 2016, as quoted by Gary C. Kessler, "GNSS/AIS Spoofing: Issues in Maritime Cyber Security," June 15-17, 2021, "GNSS/AIS Spoofing: Issues in Maritime Cyber Security" by Gary C. Kessler -YouTube
- Commission on the Limits of the Continental Shelf (CLCS) Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Islamic Republic of Pakistan, updated on May 06, 2015, accessed on April 22, 2021, Continental Shelf - submission to the Commission by Pakistan (un.org)
- Continental Shelf, *Dawn* (Karachi), March 27, 2015, Continental shelf Newspaper DAWN.COM.
- JN Mak, "Securitizing Piracy in Southeast Asia: Malaysia, the International Maritime Bureau and Singapore" in *Non-Traditional Security in Asia: Dilemmas in Securitisation*, edited by Mely Caballero-Anthony, Ralf Emmers, and Amitav Acharya (London and New York: Routledge, 2016), 81
- Pakistan and India have territorial dispute over a marshy land between Gujrat (India) and Sindh (Pakistan) which extends to Sir Creek between the two states. For details, see Sajid Mehmood Shahzad, *Impact of Pakistan Maritime Affairs on Blue Economy in Backdrop of CPEC* (Lahore: MQ Printers, 2020), p. 42, 167-174
- Principle for good order at sea," Council for Security Cooperation in the Asia Pacific, accessed on July 12, 2021, CSCAP - Principle for good order at sea.
- T. Susumu, "Suppression of Modern Piracy and the Role of the Navy," *NIDS* Security Reports, no. 4, March 2003, National Institute of Defense Studies, Tokyo, 38-58
- The global framework against maritime terrorism in the international legal context" Workshop for ASEAN Member States by UNODC, Singapore, June 09, 2009, Microsoft PowerPoint Walter Gehr & Stefano Betti Singapore 09062009 general.ppt (unodc.org).
- The official draft and relevant details can be seen at United Nations Convention on the Law of the Sea - Main Page.