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Maritime Security of Bangladesh: Facing the Challenges of Non-Traditional Threats

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Introduction

In contemporary world, maritime security remains at the forefront of political concern in many of the littoral countries bordering oceans, bays, gulfs or any other international water body. It is a part of national security and not an isolated strategic entity by itself, thereby requiring integration with the overall national security model of a littoral state.

Needless to mention, maritime security, in traditional sense, abounds in definitions, furnished mostly by the powerful maritime powers with emphasis on a strategy to fight war and restore peace in the seas. In this sense, the thinking that dominated the experts on maritime security is ‘the domination of the seas and oceans by the powerful nations somewhat on a conventional wisdom that ‘one who rules the sea, rules the land’.¹ This individualistic, acquisitive and aggressive manner of a few powerful maritime nations ultimately paved the way for development of mighty navies for power projection, gunboat diplomacy, unwarranted intervention in weak littoral states’ affairs, neo-colonialism and the like. As a result, the perception of oceanic peace and security had been the monopoly of few powerful nations with formidable military control over a vast span of oceanic space to safeguard their specific security interests on such grounds as historical claims, geo-strategic interests, commercial interests etc.² In brief, maritime security was manipulated by few as being strictly military-centric in nature, and many newly independent states in post World War II, either due to colonial legacy or for security reasons subsequently embraced this approach as manifested in their rapid naval build-ups along side their various efforts to reduce threats in the terrestrial domain by conventional means.

Thanks to the paradigmatic shift in the concept of security with its emphasis both on conventional and non-conventional threats in recent times, the phenomenon found its reverberation in the oceanic domain too where the conventional approach to maritime security, i.e., protection of maritime frontiers through build-up of navy and other fighting forces, soon gave itself up to a more comprehensive outlook towards maritime security. Interestingly, the scope and dimension of comprehensive maritime security is as broad as

¹ Inspired by the philosophy of *Mare Liberum* (doctrine of the freedom of the seas espoused by the Dutch scholar Hugo Grotius in 1618), few maritime powers of the past not only aspired to possess a virtual *carte blanche* over the use of oceanic resources, but as well chalked out a roadmap for colonizing a vast portion of the terrestrial surface mostly for economic reasons. Later on, Alfred T Mahan’s treatise “The Influence of Sea Power Upon History (1660-1783) further heightened the maritime ambition of such powers as naval power was viewed to be the key to success in international politics. Mahan’s argument that ‘one who controls the seas holds the decisive factor in modern politics and warfare’ subsequently influenced the US, few countries of Europe and Japan in becoming the ardent proponents of big navy and overseas expansion. André Vigarié, “Les Conceptions d’Alfred Mahan dans l’évolution de la pensée navale”, available online <http://www.stratusec.org/pub/pn/PN5-VIGARIMAHA.html>, date accessed 20 May 2003.

² R R Churchill and A V Lowe, *The Law of the Sea*, Manchester University Press, Manchester, 1991, p.

that of the land based one in terms of the threats and vulnerabilities, and the means for dealing with them.

Bangladesh, an Indian Ocean littoral state, has a maritime zone that engenders significant security implications for the country. However, the maritime component of the country's national security continues to remain till to date less debated with very little efforts to sensitize its constituent issues. In particular, the current perception of comprehensive maritime security in Bangladesh is insouciant, and the strategy, plans and actions with respect to it are inadequate. Comprehensive maritime security as understood in contemporary ocean governance has two facets – conventional/traditional and non-conventional/non-traditional. In consonance with the theme of the paper, an attempt will be made to identify the various non-conventional threats, discern their type and nature and the challenges they pose to the maritime security of Bangladesh. Efforts would also be made to suggest the means and ways to face such challenges in the future. With these objectives, the paper is divided into three sections, i/e., (I) Understanding Non-Traditional Dimension of Maritime Security – Few Reflections (II) Typology of Non-Traditional Threats and Vulnerabilities to Maritime Security of Bangladesh; (III) Suggested Measures for Facing the Challenges of Non-Traditional Threats to Bangladesh's maritime security. The paper ends with few general concluding remarks

Section I :

Understanding Non-Traditional Dimension of Maritime Security - Few Reflections

Due to excessive preoccupation with the conventional/traditional dimension of maritime security, a littoral country's concern for the non-traditional aspect of its maritime security somewhat remains one of indifference. Few factors explain this neglect like : (i) non-traditional threats are variegated in nature and hence difficult to identify; (ii) they occur at unspecified time, in other words, they are episodic in nature (iii) the spatial dimension of such threats is not classic and may range from inshore waters to waters in the high seas (iv) the actors involved in non-traditional threats are non-state and are splintered in nature (v) many non-traditional threats to maritime security emanate from land due to what is known as 'chaos of the littorals'.³ (vi) the non-traditional threats to maritime security are asymmetric and finally (vii) since the threats are asymmetric, any unified response to them becomes daunting.

As a result of the complex web of factors alluded to above, contemporary ocean governance is yet to theorize the concept of non-traditional maritime threats in precise and concrete terms. The UNCLOS III, considered as the constitution of the world's oceans and seas, does not mention about non-traditional maritime threats in explicit terms. However, in several of its parts and sections, there is the mention about piracy, marine pollution, safety at sea etc. **Empiricism, however, did not fail to bring non-**

³ The phrase 'chaos of the littorals' was first introduced by Major General Mile Myatt, Former Director of Expeditionary Warfare, US Marine Corps. Cited in W Lawrence S Prabhakar, 'Securing India's Littorals in the Twenty-first Century : Issues and Challenges', SSPC (Society for the Study of Peace and Conflict) Issue Brief, No. 1, August 2006, p. 4.

traditional maritime threats to the notice of a number of littoral countries. Alongside mankind's unbridled use of oceanic resources, wealth and opportunities, there has been a corresponding criminalization of the world's oceans and seas bringing in certain new kinds of threats in the medium, all with the potentials to destabilize peace and order in the oceans. As K R Singh remarks, "For want of a better term, these threats of low intensity conflict can be termed as maritime crimes of international nature. They form a wide spectrum ranging from common theft, illegal fishing, international pollution, armed robbery on sea amounting to piracy, illegal traffic in arms, drugs and humans, hijacking, sabotage, terrorism, mercenary activities and maritime insurgency operations. Very often, these criminal offences, through connected to the sea or the ship, (or fixed structure on the sea bed) have links with the shore".⁴ The Operational Maneuver from the Sea (OMFTS) of the US marine Corps after having studied the maritime scenarios in Asian-African and Asia-Pacific regions, comes out with a similar catalogue of maritime crimes.

From the standpoint of security, the mentioned threats and their effects would be shown here in a tabular form as below

Category of Threat	Source	Zone of Occurrence	Security Implications
Illegal exploitation of resources (illegal fishing, poaching, exploration of oil and gas, extraction of minerals)	Internal and External	Inshore and territorial waters, waters in non-delimited zones between the neighbouring littorals	Conflict between the stakeholders in inshore and territorial waters, and conflict between the neighbouring littorals
Deliberate pollution of marine environment	Internal (land based activities) and external (dumping of extremely hazardous wastes, heavy metal, radio active residues, discarded plastics, ballast water)	All segments of maritime zone	Threat to marine health and life due to ecological damage, destruction and alteration of marine habitats, loss of fisheries, health hazards, increasing eutrophication and changes to hydrology and the flow of sediments.
Ordinary theft, armed robbery, piracy	Internal and external	All segments of maritime zone	Violent and bloody confrontation, loss of life and property
Illegal trafficking in arms, drugs and	Internal and external	Extending from the high seas to	Threat to internal security, human

⁴ K R Singh, 'Regional Cooperation in the Bay of Bengal : Non Conventional Threats –Marine Dimensions', Strategic Analysis, March 2001, pp. 2199-2217.

human		the shore as destination	security, health security
Hijacking and sabotage	Internal and external	All segments of maritime zone	Loss of life, loss and damage of property
Terrorism	Internal and external	All segments of maritime zone	Threat to ocean peace and stability
Mercenary activities and maritime insurgency operations	Limited to the parties concerned	Normally zones beyond EEZ	Foments international terrorism, supports separatist movements, destabilizes régimes
Illegal Trade in ozone depleting chlorofluorocarbons (CFCs) etc.	External	From the high seas to the shore	Threat to internal security

Section II

Typology of Non-Traditional Maritime Threats and Vulnerabilities : The Case of Bangladesh

There is no gainsaying that the maritime situation in Bangladesh currently represents a very depressing scenario due to a number of threats that can possibly be classified into two categories, i.e. traditional and non-traditional. In the former category, the vulnerability of the oceanic frontier to naval deployments in and around the region and Bangladesh's unresolved maritime boundary with two of its neighbours, India and Myanmar figure prominently. In particular, unresolved maritime boundary poses a threat to maritime security, and scope and dimension of this threat can become more complex and serious with the years of delay in finding out a political resolution. Given the fact that Bangladesh and India are at conflict with each other over demarcation of maritime boundary, the EEZs (Exclusive Economic Zones) of the two countries may give rise to conflicts over the sharing of resources, in particular fishes, oil and gas. Also, because of unresolved maritime boundary, Bangladesh is constrained in its claim to an extended continental shelf of 350 nautical miles, and over few new born islands in its maritime zones, for example, 'the new born island of South Talpatty'. Under such circumstances, the possibility of a clash with India may arise while undertaking activities like surveillance, combating pollution, chasing the pirates and poachers etc. The same holds true in case of unresolved maritime boundary between Bangladesh and Myanmar. In conventional sense, threats to Bangladesh's maritime security may also emanate from such activities like naval blockade, attempt to create spheres of influence by the powers – both regional and extra-regional etc. All such threats need to be thwarted by Bangladesh with means ranging from diplomacy to military option if so needed.

Conversely, from a non-conventional angle, Bangladesh's maritime policy is required to ensure the safety of sea lines of communication (SLOCS), fight marine pollution of different types, interdict maritime crimes like poaching, sea piracy, illegal migration, traffic in small arms and drugs, manage disasters, save the coastal zone from degradation etc. This section of the paper attempts to study the non-traditional threats to the maritime security of Bangladesh by focussing on their nature, the levels at which they occur and their effects. Before undertaking a discussion on the main theme of the section, it is pertinent to present the maritime matrix of Bangladesh in a manner as brief as possible.

Three zones constitute the maritime matrix of Bangladesh. The first one consists of four successive maritime zones enjoined upon Bangladesh (as in case of other littorals) by the UNCLOS III, i.e, Territorial sea (12 nm), Contiguous zone (24 nm), EEZ (200 nm), and Continental shelf (350 nm), all determined from a fixed baseline as per the UNCLOS. It should be mentioned that the claim over Continental shelf (350 nm) is subject to approval by the Commission on the Limits of the Continental Shelf (CLCS). The second is the coastal zone of Bangladesh which in general sense is identified as a 710 km long stretch of land connected to the Indian ocean via the Bay of Bengal. The region, therefore, remains under the salinity and tidal effects of the Bay – two important criteria to delineate the region.⁵ The coastal zone comprises an area of 36,000 sq. km (accounting for nearly 25% of the country's total land surface) and is an important bio-geographic unit that is rich in bio-diversity and in various kinds of renewable/non-renewable and environmental resources. It may be mentioned that the coastal zone of Bangladesh hosts the largest littoral mangrove belt in the world stretching 80 km into Bangladesh hinterland from the coast. The region is also home to many different species of birds, mammals, reptiles and fishes. Next to coastal zone, it is the zone that consists of small off-shore islands (more stable) and chars land masses (less consolidated and hydromorphologically dynamic). These areas are subject to strong wind and tidal interactions throughout the year and are inhabited by a large number of people.

In the context of the paper, the above zoning finds its rationale in certain facts. *First*, the maritime zones, the coastal zones and the zone consisting of off-shore islands and chars lie in a geographical continuum where the influence of the oceans and seas is predominant. The mentioned areas, in effect, constitute an interface between land and waters and an integrated whole that should figure in any consideration for maritime security of a littoral state. With strong links to the sea, the people inhabiting the areas possess a culture which is oceanic in nature and it determines their way of life, means of livelihood, social and customary practices etc. For such people, considered to be one of the most vulnerable groups, access to and use of the sea is not only essential for their livelihoods but that it also gives meaning to their lives – a meaning which has evolved over many centuries and in which behaviour and value systems can not be explained without reference to relationships with the sea.

⁵ Dr. Monowar Hossain, 'The Greenhouse Effect and the Coastal Area of Bangladesh : Its People and Economy', in Jasha J Maudud, Harun Er Ershad, Dr. A Atiq Rahman and Dr. Monowar Hossain (ed.), *The Greenhuse Effect and the Coastal Area of Bangladesh*, Proceedings of an International Conference held in Dhaka, Bangladesh, 5 March, 1989, p. 60.

Second, be it in case of land based security or marine security, most of the threats and vulnerabilities of non-traditional nature are related to human-beings with few among them having security implications in a conventional sense. In Bangladesh where human security discourse remains at the apex of the current national security debate, any attempt to de-link it from the ocean or, in other words, any rejection of its marine dimension would bear serious consequences for its people already groaning under several critical human security issues like abysmal poverty, malnutrition and deterioration in health, environmental degradation, soaring unemployment, lack of entitlements, political insecurity, fear of violence and crimes and the like. While this is a reality in the land, it is equally important to find if a similar scenario exists in the marine matrix of the country. In this regard, there is the need to bring people at the epicentre of any discussion on non traditional threats and vulnerabilities as existing in the country's marine domain.

Third, most of the non-traditional threats and vulnerabilities in the ocean medium emanate from the land to the seas. As a result, in contemporary ocean governance, littoral security has emerged as a vital dimension of maritime security of a state. As W Lawrence S Prabhakar, while referring to India's maritime security, remarks, "(...) the asymmetric threats at sea are sourced from the littorals. If the asymmetric threats are tackled efficiently in the littorals, then the prevalence and the persistence of the threats at sea could be minimized. As these threats are sourced from the littorals, the significance of the littorals as the bastion of maritime asymmetric threats needs critical analysis".⁶ Prabhakar cites three reasons for the emergence of littoral as the most contentious and chaotic perimeter for conflicts, i.e. (i) the porous nature of coastal borders; (ii) increasing demographic density in the coastal littoral areas and (iii) the difficulty in undertaking exercise monitoring and operational manoeuvres due to high demographic presence and fragile civil governance.⁷

The relevant question now is : what threats and vulnerabilities are discernible in the mentioned segments? Let us take the case of maritime zones. Transposing the classification of low intensity conflict in the marine domain as furnished by K R Singh in case of Bangladesh would not be without its relevance. However, one needs to differentiate the nature and intensity of such threats and vulnerabilities as observed in case of Bangladesh from the ones envisaged by Singh in general for the world's oceans and seas. First, in the trajectory of maritime crimes in Bangladesh, it is piracy that tops the list. However, the nature and kind of piracy that takes place in Bangladesh marine waters do not conform to what have been envisaged in the UNCLOS. An alternative definition of piracy as provided by the IOM is normally referred to when acts of piracy in Bangladesh context are mentioned like armed robbery, theft and dacoity. Piracy and armed robbery are global phenomena and their occurrences are concentrated in the waters of West Africa, the Strait of Malacca, the South China Sea and South America. Bangladeshi *jol doshus* (pirates) do not have the wherewithal to go to high seas and commit piracy. As mentioned, their acts are limited to armed robbery, minor theft and

⁶ W. Lawrence S Prabhakar, *op.cit.*, pp. 4-5.

⁷ See for details, *Ibid.*, pp.1-9.

dacoity on the ships, both foreign and national, anchored in territorial waters or inshore waters near the coast or even at the ports (Chittagong and Mongla). ‘They mainly attack ships for cash, cargo, personal effects, ships equipment and in fact anything which can be removed’.⁸ The pirates also attack the marine fishing vessels for fish and money. It is important to take into account few ominous features that mark the current piracy in Bangladesh’s oceanic space with implications for security like (i) a high degree of violence demonstrated by heavily armed criminals (ii) money, property of the crew, negotiable goods, cargo and ship’s equipments are generally the target items (iii) targeting ships while at anchor (iv) attack by pirates from neighbouring countries is common and (v) the unarmed coastal fisherman are as well the victims. It is interesting to note few traits of the Bangladeshi jol doshus. (i) they are land based having sanctuary in the coastal forests (ii) they are inter-linked with the local hooligans (*mastan*) who encroach upon the local resources (fish, forest resources etc) and their owners in an unbridled manner (iii) they are a part of the nexus involved in arms trafficking (vi) for lack of sophisticated ships for going to deep waters, their activities are confined to territorial and inshore waters – supposed to be under strict surveillance of the law enforcing agencies.

Next it is illegal fishing and poaching in the Bangladesh marine waters that draws one’s attention. In effect, illegal fishing takes place in the country right up from its inland waters down to deep waters in the ocean. In the former case, fish catch becomes illegal when prohibited nets are used, unlicensed fishermen catch fish, fishing is non-seasonal, fish catch during breeding period, catch of fish fries (immature fish) and Jatka etc. Of these, the illegal catch of jatka (juveniles of Hilsa)⁹ is the most serious one as Hilsa shad contributes 30% of the total fish production in Bangladesh and about 40% of fishermen or 2% of the total population of the country earn their livelihood on Hilsa fishery directly or indirectly. They are caught in large amount using current nets of small mesh size during their grazing period in rivers as well as in sea shore by artisanal fishermen (please see annex) . Then comes illegal fishing in the coastal waters which is normally in the form of overexploitation of fishes by the fishermen both artisanal and traditional. Scramble for limited stock of fishes leads to conflict among the stakeholders in the region with implications for human security. Another illegal activity in the shore waters is the fishing by poisoning and explosives. Many reports have been filed on fishing by poisoning with certain chemicals in some areas of the Sundarbans. Overexploitation of fish also takes place in EEZ and the waters beyond it which if not contained will contribute to greater reductions in production of marine fisheries in the future. In the Bay of Bengal, industrial trawling for catching shrimp also constitutes an illegal activity. Marine fishery, next to agriculture, is an important occupation of the coastal people and the sector plays a significant role in the economy by providing 6% of GDP, 9.30% of

⁸ Captain M Fafid Habib, psc, BN, ‘The Non-Conventional Aspects of Maritime Security : A Bangladesh Perspective’, Individual Research Paper, NDC, 2006. jk

⁹ According to a report published through Bangladesh Fisheries Research Institute, over 3700 metric tons of jatka are caught annually during their nursery season from inland rivers. Dr. Mizanur Rahman, ‘The Story of the Hilsa Shad’, available online <http://asiarecipe.com/banchad.html>. date accessed 02 February 2009.

export earnings, 12% of employment and 80% of animal protein consumption.¹⁰ This sector is, however, under threat due to the intrusion of foreign fishermen into Bangladesh territorial waters mostly from countries like India, Myanmar, Thailand, Sri Lanka to catch fish with mechanized trawlers and boats. While fish in the Bay already stay away from Bangladesh shore due to extreme marine pollution caused by dumping of industrial effluent and waste, oil spillage etc., the frequent sealing of marine fishes has caused a decline in the country's stock, both pelagic and demersal, with serious consequences for the nation.¹¹ A survey by the UNDP transmits an alarming signal. The estimated annual sustainable yield (demersal and pelagic fish and shrimp) from the shore to the outer limit of the EZ is about 3,89,000 metric tons, out of which about 1,18,000 metric tons are harvested annually. The loss of the remaining 2,71,000 metric tons is due to natural mortality and unauthorized exploitation. As the survey suggests, most of the loss is due to unauthorized exploitation and poaching by foreign fishing trawlers.¹² While there is no denying the fact that Bangladesh Navy and Coast Guard, from time to time, apprehend foreign fishing vessels of different origin, nonetheless, their capability in many instances is constrained by the lack of surveillance and monitoring vessels. Commodore Mohd Khurshed Alam of Bangladesh Navy frankly admits the fact in the following words, "The reality today is that foreign fishing trawlers do poach in our waters because the Navy do not have the wherewithal to keep an eye on all that float in our vast waters and apprehend the poachers".¹³

The trafficking of small arms, drugs, contraband goods etc. has entered the list of criminal activities in Bangladesh's maritime waters in recent times.¹⁴ In Bangladesh, trafficking of small arms considered to be a non-conventional threat to its security, is no longer confined to air and routes at present are also being conveniently used for the purpose. 'Arms originating from Afghanistan, passing through Pakistan, mostly enter the country through Cox's Bazar, Chittagong port, and some of the offshore areas. The same entry points are used when arms come South East Asia via Thailand. The seizure of a large consignment of sophisticated arms at Cox's Bazar in 1997 bears this out'.¹⁵ There

¹⁰ Dipak Kamal, "Bio-diversity Conservation in the Coastal Zone of Bangladesh", Paper submitted in partial fulfilment of the requirements for the Degree of Master in Marine Management at Dalhousie University, Halifax, Nova Scotia, Canada, 1999, p. 31.

¹¹ Momtaz Uddin Ahmed, once the principal scientific officer of the government's Marine Fishing Department, expressed his anxiety in the following words, "If this menace of pollution and indiscriminate fishing cannot be stopped, the Bay of Bengal might be left without any fish". National News, available online <http://bangladesh-web.com/news/jan/01/n01012003.htm>, date accessed 02 April 2003. A survey by the UNDP

¹² Commodore Shah Iqbal Mjtaba, 'Resource Management of Bangladesh Exclusive Economic Zone – A Case Study on Pelagic Resources', *NDC Journal*, Volume 1, Number 1, June 2002, p. 71.

¹³ Commodore Mohd Khurshed Alam, 'Maritime Strategy of Bangladesh in the New Millennium', *BISS Journal*, Volume 20, Number 3, 1999, p.213.

¹⁴ See for details, Neila Husain, "Proliferation of Small Arms and Violence in Bangladesh: Social Security" in Mohammad Humayun Kabor (ed.), *National Security of Bangladesh in the Twenty-First Century*, Asiatic Press and Publishers Limited in association with Bangladesh Institute of International and Strategic Studies, Dhaka, 2000, pp.163-180.

¹⁵ The report published in *The Daily Star* of 1 November 1007, and cited by Neil Husain in her article entitled, 'Problems of Proliferation of Small Arms in Bangladesh' in Dipankar Banerjee (ed.), *South Asia at Gunpoint*, Regional Centre for Strategic Studies, 2000, p. 8.

seems to exist a nexus between the traffickers and various crime cartels in the coastal areas for landward delivery of the illegally trafficked arms. The country's two important sea ports, Chittagong and Chalna are the most convenient transit points from which the illegal arms find their way either to the local market or to any other place.¹⁶ The Sundarbans forest zone in the South is also used as a transit area for illegal arms from different international sources. Simultaneously, there takes place the traffic in contraband items like prohibited drugs, liquors etc. across the marine waters. Frequent smuggling of goods like timber, rice, salt, luxury items, diesel, etc. in and out of the country is a regular phenomenon in the Bangladesh maritime waters.¹⁷ In a gruesome manner, slavery also takes place along the Bangladesh maritime waters. In this respect, various areas in the coastal zone including few chars (off-shore islands) act as the transit points from where women and children are transported out of the country for destinations like, India, Pakistan and the Middle East for employment in various inhumane and immoral activities.¹⁸

Lastly, a crime of serious magnitude in Bangladesh waters is the pollution of marine environment being caused by national, regional and international sources. Currently, the country's marine environment is being threatened by pollutants washed down directly from land and dumping. In addition, a large number of up-stream rivers and waters that have their origin in the countries like India, Nepal, Bhutan and China ultimately empty into the Bay of Bengal with a colossal discharge of pollutants from different sources.¹⁹ Many sector activities like industries, fisheries, forestry, transport etc. have their deleterious effects on the coastal and marine environment of Bangladesh. The pollution sources also include oil discharge from ships and mechanized vessels, ships breaking and repairing activities, ballast and bilge water discharge, refinery waste products, handling loss and accidental spillage etc.²⁰ There is also huge discharge of sewage from ships in the coastal areas of the country. In addition, rotten food grains cement dust, fertilizer, torn bags, mats and broken dungarees are frequently dumped into the marine water near the port areas of the country. While the mentioned causes of marine pollution are internal in nature, there are as well the external sources of pollution to further aggravate the problem. Both land-based and coastal activities of the littoral countries contribute to marine pollution for reasons like dumping of solid waste, discharge of chemicals used in agriculture, drainage from port areas, deposit of domestic and industrial effluents, coastal construction and tourism activities etc.²¹ Also discharge through out-falls and various containments from ships, sea-based activities, in marine transportation offshore mineral exploration and productive activities, and accidental oil spills further exacerbate pollution in the ocean.²² In this respect it is relevant to mention that because of the open nature of the ocean and continuous flow of currents (both clock and counter-clock wise), all the countries of the region feel the effects of pollution. As a result, the common interest in

¹⁶*The Daily Star*, 12 December 2002.

¹⁷*The Bangladesh Observer*, 25 November 2002.

¹⁸*Dainik Ittefaq*, 25 November 2002.

¹⁹Md. Yousuf Mehedi, "Controlling Pollution in the Coastal and Marine Zone of Bangladesh: Developing a management Approach". Paper submitted in partial fulfilment of requirement for the Degree of Master of Marine Management at Dalhousie University, Halifax, Nova Scotia, Canada, 2001, p. 23.

²⁰*Ibid.*, p. 24.

²¹*ESCAP Report*, 1988.

²²*Ibid.*

combating pollution should at least be guided by their concern for fisheries and other marine habit.

Let us now discuss about the threats and vulnerabilities in second segment of Bangladesh's maritime matrix – the coastal zone. From the human security perspective, this zone is the most affected one for reasons like fragmented social structure, economic threat, widespread poverty, perennial vulnerability to natural hazards, threatened coastal ecosystem, coastal pollution, multiple and conflicting demands on the coastal resources, absence of political organizations. Each of the points needs little elaboration. While the coastal people have been maintaining a harmonious relationship and bondage among themselves since long, a fragmentation is now being created in their society by the intrusion of outsiders who for economic reasons use the innocent and docile coastal people as pawns in their hands. For possession of accreted lands, acquisition of agricultural land for shrimp culture and grabbing of forest resources, the outside agents resort to a policy that divides the society into two – their supporters or non-supporters. In particular, the introduction of shrimp culture in the coastal zone by the outsiders has led to the creation of a group of local touts (called *Mastans* in Bengali) who are trying to take all possible advantage in the region through unscrupulous means. Many of them remain under political patronage, and claim themselves to be a stakeholder in the region's resources by force. The vulnerability of the coastal population vis-à-vis the outsiders is explained by poverty, illiteracy, debt burden, remote habitat, absence of political participation and support from the authority etc. The threat as felt by coastal community is in the form of an encroachment upon their traditional means of livelihood and acquisition of wealth from their local resources by force and coercion.²³

At the economic front, the threats are multifold. The practice of shrimp culture, although is helping the country to earn foreign exchange, the local population has not been benefited by it. There are indications of resource flight and resource degeneration in the coastal area of the country due to the expansion of shrimp culture with irreversible socio-economic and environmental losses for the region. Some of these are : (i) survival of the traditional farmers, artisanal fishermen, salt producers, landless and marginal populations under threat; (ii) losses of common property resources, i.e., mangrove forest resources, grazing land/pasture, salt fields, open water capture fish etc; (iii) loss of a range of biodiversity and (iv) unjust distribution of wealth earned from the local resources. In brief, the increased pressure on the existing resources is causing a decline in key common property resources such as marine fisheries, mangrove and fish water resources. In the ultimate analysis, the coastal community will remain to be the worst sufferers economically. They as well remain uncertain about any future prospect of income from the exploitation of local resources by government or private agencies. Then comes the issue of poverty which finds its manifestation in the coastal zone in more severest forms for the reasons like : (i) poor level of services and poorly developed infrastructure thereby increasing their isolation from the rest of the country; (ii) changes in land use pattern and poor regulation for land distribution and resettlement; (iii) poor access to technologies; (iv) poorly recognized gender sensitivity; (v) exploitation by the outsiders, both

²³ See for details, Abul Kalam Azad, 'Integratead Coastal Zone Management in Bangladesh : A Case for People's Management', *BISS Papers* 20, 2003, pp. 46-49.

government and private; (vi) poor resource management and finally (vii) marginalization of the poor. Some of the appalling manifestations of poverty in the coastal area are hunger and malnutrition, ill health, unemployment, lack of access to safe drinking water, low access to education and other public services and resources, exclusion, lack of participation, violence etc. In effect, the deplorable economic conditions of the coastal people create an atmosphere of insecurity and uncertainty thereby keeping the population in constant fear and want.

Then comes the factor of perennial vulnerability of the coastal people to natural hazards. This is explained by certain facts : (i) the continuous threat of cyclones and storm surges; (ii) the ongoing process of land erosion and accretion, affecting many people's property and livelihood. The poor are the victims of erosion, whereas the accreted land is grabbed by the people with local influence; (iii) sever water congestion on old accreted land and associated drainage problem; (iv) salinity intrusion and (v) the climate change induced impacts as sea level rise, change in storm surges frequencies and changes in rainfall patterns in the river basin upstream. People's vulnerability to all such hazards is accepted almost as a *fait accompli* as no concrete measures of permanent nature have yet been taken to mitigate them except to respond to episodic crisis. Multiple and conflicting demands on the coastal resources is another serious problem in the coastal zone of Bangladesh. Human population increase coupled with demand for outputs and services and the need for economic development has led to multiple and conflicting demands on the coastal area stemming from both within and outside. For example, land use in the coastal zone is found to be ad-hoc ad unmanaged which results in misuse in some places and undue exposure of people to cyclone threats in others. In many Thanas, there are conflicts over land use between sectors as well as between people, e.g., aquaculture use versus mangrove shelter belts and agriculture versus shrimp cultivation. Also confrontations between forestry, livestock, aquaculture and other interests over future uses of newly accreted land are not uncommon. Too often, these conflicts are stirred up by unilateral action of central agencies and local communities end up as helpless victims. Finally, coastal pollution and threatened coastal ecosystems bear immense human security implications for the people of the area.²⁴

In off-shore islands and chars, fishing is the main source of livelihood for the majority of the people, Being remote from the mainland, development activities go at a slow pace in such areas thereby resulting in perennial problems of unemployment and poverty. Like the inshore coastal zone, this group of off-shore islands remains vulnerable to various natural hazards of oceanic origin. Cyclones which sometimes are accompanied by storm and tidal surges, pose multiple threats to human society with erosion of soils and sea coasts. They destroy property and disrupt normal economic activities of the islanders leading to food shortage and famine. While poverty, malnutrition and health hazards, unemployment and the like mark the daily life of majority of the people inhabiting several off-shore islands in Bangladesh, it is the constant violence that probably is the most serious threat to human security in such remote areas. In effect, chars and off-shore islands are the theatres of various crimes. 'Char land related crime and violence mostly occurs in Barisal, Patuakhali, Noakhali, Bhola and Lakshmipur. Grabbing crops, land

²⁴ *Ibid.*

grabbing, loot and robbery are main types of crime. Sporadic and autonomous settlements in newly accreted land often lead to factionalism and skirmish. In land disputes and conflicts, many people are harassed, kidnapped, evicted and killed. Reasons are unsettled district boundary dispute, isolation and vested interests of the power brokers. In recent months. Boyer char (Noakhali) hit the news headline with incidents of rape, looting, house burning and killing'.²⁵

Discrimination against women is a common phenomenon in chars and off-shore islands. Harsh nature of oceanic environment prefers masculinity. As a result, violence against women is the order of day in such areas. Violence includes domestic violence, trafficking, rape and sexual abuse , acid throwing etc. 'Family and land disputes, refusal of marriage proposals, rejection of sexual advances, political vengeance, and unmet dowry demand are some of the reasons behind violence against women'.²⁶

On the basis of above discussion, the following table shows the marine areas of Bangladesh, the human security problems therein and their impacts.

Zones	Human Security Issues	Impacts
Maritime Zones	Piracy, illegal fishing and poaching, smuggling, pollution	Loss of life and property at ships, loss of fishermen lives, looting, loss of fish stocks, increase in poverty of the fishermen, threat to physical security, deterioration in law and order situation, degradation of marine eco and bi-diversity system
Coastal Zone	Threat to traditional means of livelihood, abysmal poverty, poor level of services and poorly developed infrastructures, coastal pollution, natural disasters (cyclones, storm surges, coastal erosion), absence of political organizations, ineffective law enforcing agencies.	Loss of agricultural production (due to shrimp cultivation), perennial unemployment, conflict over scarce resources, loss of human lives and property, damage to health, displacement and sufferings of human population, loss of marine bio-diversity, over exploitation of coastal resources, threats to the poor by the outsiders (investors in shrimp cultivation, private

²⁵ State of the Coast, 2006, published by Integrated Coastal Zone Management Program, Bangladesh, p. 120.

²⁶ *Ibid.*

		agencies), absence of law and order
Offshore Islands and Chars	Natural hazards of oceanic origin, lack of employment opportunities, various crimes, discrimination against women, ineffective law enforcing agencies	Loss of life and property, sea erosion, abysmal poverty, kidnapping, killing, domestic violence, trafficking, rape and sexual abuse, absence of law and order

Section III

Facing the Non-Traditional Threats – Few Suggested Measures

What could be the possible measures to address the critical human security issues as identified in three distinct maritime zones of Bangladesh. In consonance with the basic principles of contemporary ocean governance, these problems are to be analyzed at three distinct levels, i.e., national, regional and international.

National level : Against the background of numerous threats to the coastal zone and the opportunities lying therein, no other approach other than integrated coastal zone management (ICZM) would be the most appropriate and rational one to address the current problems of multifarious nature as being faced by the region. Needless to mention, ICZM is now recognized as an important component of contemporary ocean governance that seeks to improve traditional forms of development planning in four distinct ways, i.e., (i) furtherance of a thorough understanding of the natural resources system which are unique to the coastal areas and their sustainability within the context of a wide variety of human activities; (ii) optimization of the multiple use of the coastal resource system through the integration of ecological, social and economic information; (iii) promotion of interdisciplinary approaches and inter-sectoral cooperation and coordination to address complex development issues and formulate integrated strategies for the expansion and diversification of economic activities and (v) assistance to government to improve the efficiency of capital investment and natural and human resources in achieving economic, social and environmental objectives as well as in meeting international obligations concerning the coastal and marine environment.²⁷

With the above objectives in mind, the overall goal of ICZM in Bangladesh should be to create conditions for reducing poverty, developing sustainable livelihood and guaranteeing the physical safety of the people. The rationale behind is rooted in the fact that a large number of people, particularly the poor depend directly or indirectly on natural resources such as land and water for their livelihood. This implies sustainable use of the existing resources and their management for present and future generations. As coastal zones offer physical and biological opportunities got increasing human use, it is

²⁷ See for details, ‘Future Challenges in Ocean Management : Towards Integrated Ocean Policy’ in Paolo Fabbri (ed.), *op. cit.*, p. 598.

the objective of ICZM to find the optimum balance between these uses based on a given set of objectives. In this respect, based on the above goals, the three cardinal objectives, i.e., conservation, protection and development that figure in the ICZM continuum in generally are equally relevant in case of Bangladesh excepting the fact that they have different interpretations in view of the issues that are specific and peculiar to the country. While this may be the scientific approach towards ocean management at the national level, there are other needs like awareness raising among the general people about ocean and its use, augmentation of the navy and other maritime enforcement agencies, strong political will etc.

Regional level: As indicated, many of the problems in the maritime zone of Bangladesh like piracy, illegal fishing, trafficking in small arms, drugs, human etc. have regional links. As a result, regional cooperation is an essential component of the emerging system of ocean governance. Regional level is the optimum level for the solution of many problems which transcend the limits of national jurisdiction but are not necessarily global in scope. Many aspects of pollution, fisheries management, protection and preservation of the marine environment, marine scientific research, marine safety, enforcement responsibilities, disaster management etc can be solved through cooperation between and among the littoral states. In this regard, it is relevant to mention that various articles of UNCLOS such as 74, 83, 122, 123, 197, 199, 200, 207, 208, 210,212, 276 and 277 deal with maritime cooperation in several dimensions.

New ways of enhancing technology development and transfer or integrating sustainable development and human security – essential for the effective implementation of all the UNCLOS/UNCED generated Conventions, Agreements and Programs – can most suitably be introduced at the regional level. It should be borne in mind that in South Asia, regional cooperation on oceanic issues has not made any headway till now due to political tension and mistrust in the region. Thus, few regional organizations like Regional Seas Program under the aegis of UNEP (United Nations Environment Program), FAO initiated Bay of Bengal Program (mostly for fisheries), Indian Ocean Initiative are credited with very success in their respective areas of operation. For better management of its marine resources and protection of maritime environment, Bangladesh can go for Joint Management, Joint Surveillance, Joint Disaster Management Program with her littoral neighbors. This could minimize loss to human life and property and restore peace and order in the ocean for the welfare of the country and its people.

International level: In contemporary ocean governance, global level is of crucial importance as the entire local, national and regional systems tapers to an apex at this level. At the international level, it is UNCLOS that has set the central regime for ocean governance through a system of treaty and few sub-regimes. The most important of these is the International Maritime Organization (IMO) that is taking the lead at the global level in formulating and coordinating the fight against piracy and armed robbery at sea based on a number of UNCLOS articles. It is important to take note of IMO's efforts in coordinating its activities with the United Nations International Drug Control Program (UNDCP) and the Global Program Against Trafficking in Human Beings in combating crimes of such nature regionally and nationally. Also at the global level, the Food and

Agricultural Organization (FAO), Intergovernmental Oceanographic Commission (IOC) of UNESCO, International Hydrographic Organization (HO), United Nations Environment Program (UNEP) discharge functions related to the oceans and seas for preserving the ocean's environment, its source of good, regulating its climatic conditions etc. Similarly, Chapter 17 of Agenda 21 provides certain mechanisms for sustainable management of the oceans, protection of its environment and guaranteeing oceanic peace and stability. Few mechanisms of Chapter 17 also work as watch-dogs that nothing wrong goes in the oceans like the International Sea-bed Authority, the Commission on the Limits of the Continental Shelf, the International Tribunal for the Law of the Sea with associated arrangements permitting conciliation commissions, arbitral tribunals and finally the meeting of state parties.

Conclusion

The foregoing discussion clearly reveals that the prospect for imposing human security in the oceanic domain no longer remains in the imagination of the security community. It is now a reality despite a host of problems and challenges on the way. . In the final analysis, it should be borne in mind that effective ocean governance requires expertise, epistemic community, institutional arrangements, legal structures finance etc. However, given the international dimension of ocean governance, and in particular, the growing human consciousness vis-à-vis the oceans, a global perspective in ocean resource development is on the offing. Towards this end, the prospect for meeting many human security issues in the oceans is as bright as in the terrestrial domain. Perhaps, the exceptionality of ocean governance is that it provides solutions to few critical oceanic issues in multi-layered level. If efforts at the national level are insufficient, then the gap can be filled up by regional means. In order to bridge the two, there is the possibility of help and assistance from international level as well. If Bangladesh, with its limited capacity, fails to implement the international programs related to the oceans, then much would depend how it can take advantage of international assistance in promoting its ocean regime through constructive and effective governmental policies. The expected dividends- economic, political, social, human, psychological etc. of all cooperative endeavours under the guidance as provided by ocean governance would be promising for both the current and future generations of Bangladesh.